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THE PASSING OF PLANS

THERE is a factor in connection with post-war building which is less tangible than any on the "commercial" side, but which may have as great an effect in causing delay in building as any shortage of materials, for the reason that it operates at the earliest stage when the architect still has his design on the drawing-board—and that is the passing of plans by a local authority.

It is worth while to consider what might be done to overcome this difficulty as it affects immediate post-war building, without sacrificing the advantages which are so strenuously claimed for the local government regulation of building in this country. (In considering the problem generally, one must assume that decisions one way or another have been taken on the Uthwatt, Scott, and Barlow Reports. Any power these reports may have in delaying building work results from the lack of decisions upon them, and as soon as decisions have been taken, one way or another, their operation as delaying factors will, *ipso facto*, cease.)

Let us consider the case of housing. Where a local authority is building its own houses, or where the Government is building them, it is safe to assume that there will not be any unnecessary delay in getting plans through the local council. The architect can usually go forward with his scheme in the confidence that whatever he proposes within reason will be accepted. The position of the local authority with its own housing scheme is likely to be made even easier in this respect. Lord Woolton, speaking in the House of Lords on December 10, 1943, said that the Ministry of Health would be the single channel of communication between the Government and the local housing authority, and that this Ministry, in collaboration with the Ministry of Works, the Ministry of Town and Country Planning and the Ministry of Agriculture, were preparing for local authorities a manual of general instructions on housing matters.

It is of course not yet known what subjects the manual will cover, or even whether it will aim at completeness to the extent of dealing with those housing matters which fall automatically to local government control, such as building bye-laws, or may fall to local government control if the local authority owns a water, gas or electrical undertaking with bye-laws of its own. The manual may not go this length, but the inclusion of the Ministry of Town and Country Planning amongst the collaborators gives rise to hopes that some of the less clear features of control that fall within the general ambit of that Ministry will be made crystal clear.

It may be, however, that the manual will approach more nearly to a code of practice or specification for low-cost houses of a nature akin to the specification observed for the certificate of the National House Builders' Registration Council. In any case the manual, whatever form it takes, should make easier the task of the local housing authority because it will obviously deal with questions that need answering, and because its interpretation will be in the hands of a single Government Authority; but will it make easier the task of the private building contractor who carries out housing schemes with or without financial help from the building societies, or the housing trust or corporation?

These and other private enterprise builders may be expected to provide the greater part of the 4,000,000 houses required in ten years. At present it takes a builder (or it should take a builder) a maximum of five weeks to get his plans passed by the local authority. Another two or three weeks may be added if a town-planning point is involved, or even longer if the housing site happens to coincide with some new arterial road envisaged in the new layout of (say) London.

Getting his plans through the local authority, who are probably themselves short of technical staff, is a most anxious matter for the architect or builder (although practice makes perfect even in this). Will the new manual make this easier? It may well do so, because instructions placed in the hands of building inspectors which are clear and subject to uniform interpretation will assist in the field of building.

Too much must not, however, be expected of the Government manual, especially at the outset! In the comparatively simple matter of building bye-laws which touch housing at but few of the very many points involved in a complete scheme, and which are practically uniform throughout the country (excepting London, of course), there has been found room for many divergent interpretations by building inspectors and the councils they advise.

It is in the diversity of interpretation of building and planning regulations of all kinds and the difficulties involved in squaring one interpretation with another that the architect, the builder, and the manufacturer of components and supplies experience delay and frustration. Any national effort to secure uniform and speedy interpretation of bye-laws, regulations, manuals or what not, particularly when they concern new materials and methods of building, will make a valuable contribution to the speedy and effective provision of houses for the people and of building work generally.

These problems in all their bearings have given serious food for thought to progressive local authorities who are anxious over housing and other building work. It may be that they have in their own hands the means to deal with them. The national organisations of local government bodies such as the Association of Municipal Corporations, the Urban District Councils' Association and the Rural District Councils' Association, have proved their worth in the past. They might do a great work for building if they will get together now with the object of examining rapidly the whole range of administrative problems which affect building, and, if possible, establishing mechanism by which their own members could agree upon the uniform speedy interpretation of knotty points as and when they arise. To help them they already have the mechanism established by the 1936 Public Health Act, under which points in dispute over bye-laws can be submitted to the Minister of Health. Possibly the Minister would collaborate in a wider field and, with good will on all sides, one of the most persistent of the difficulties which impede building might be finally removed.

NOTES AND NEWS

The London Plan and the Home Counties.

THE proposal of the L.C.C. to create dormitory settlements in the Home Counties has not been received by the Home Counties with any notable enthusiasm. Following the protest from Hertfordshire against the Oxhey scheme comes one from Surrey. Speaking at a conference at Kingston, convened by the Surrey Federation of Labour Parties, Councillor Tom Braddock said there was a grave danger of finding the north-east corner of the county, already overcrowded, still further built up. The L.C.C. were trying to rid themselves of the congested conditions which obtained in their own area and impose the very thing they objected to on the districts immediately over their border. If their scheme succeeded there would be a further spread of the terrible sprawl of London. That would be the natural result of approaching the problem from the wrong aspect, that of providing houses and living accommodation without giving consideration to proper planning. It would need all the effort Surrey could put in to prevent such a catastrophe.

A Plan for Surrey.

The Surrey Federation of Labour Parties offers more than mere opposition to the L.C.C. proposals; it has produced a report which shows how the overpopulated north-eastern area of the county, which has grown up in the last twenty-five years, can be decongested and an overflow of population from London accommodated by new and replanned "garden towns," the spaces cleared being brought back to a state of decency and dignity. It is estimated that an additional quarter of a million people can be properly provided for in Surrey. The report is illustrated by a number of excellent diagrammatic plans, prepared by Mr. Tom Braddock, one showing the position of proposed new towns throughout the county, a series of four showing the application of the proposed method of clearance and redevelopment to the particularly congested area of Mitcham, and another the planning of an area involving more than one town and the relationship between them. The report is obtainable, price 6d., from Mr. G. L. Deacon, 35, Nelson-road, New Malden.

The County of London Plan on Tour.

THE first public showing of the popular touring Exhibition of the County of London Plan was opened at the Housing Centre premises in 13, Suffolk-street, S.W., on January 21, by Professor Reilly, O.B.E., F.R.I.B.A., in the chair, and Mr. W. R. Davidge, F.R.I.B.A., P.P.T.P.I., who spoke. The Exhibition will remain on view at the Housing Centre until February 12, from 9.30 a.m. till 5.30 p.m.; 12.30 on Saturdays.

The Crystal Palace: Competition Plans.

IN his report to the trustees of the Crystal Palace at a meeting held on January 19, Sir Henry Buckland said that in October, 1941, he submitted a scheme for the future of the site. In April of the following year he discussed the matter with Lord Keynes, Chairman of the Council for the Encouragement of Music and the Arts, who brought it before the C.E.M.A., with the result that a special committee representing the council and the trustees was formed to pursue relevant questions and obtain architectural proposals. Unfortunately they had not yet come to terms with the Royal Institute of British Architects, whose conditions respecting an open competition for designs for a new building were thought to be so exacting as to make it impossible for the joint committee, with its limited financial resources, to accept.

The Royal Institute of British Architects, in a statement issued on January 21, said that there was no truth in the suggestion that it had been holding up the competition for plans for the development of the Crystal Palace site. "Negotiations took place between the R.I.B.A. and representatives of the Crystal Palace Trustees and C.E.M.A., and agreement was reached as to the terms of a competition," added the statement. "It was, and still is, the opinion of the R.I.B.A. that the present time is not appropriate for the holding of large-scale architectural competitions of this nature, when so many of the ablest young architects are serving their country in the Services, and therefore would be unable to take part. Nevertheless, the R.I.B.A. was prepared to give every assistance if it had been decided to proceed with the competition now."

Yugoslav Exhibition at the Royal Academy.

AN exhibition of Yugoslav culture, sponsored by the Royal Yugoslav Embassy and the British Council, is now open at the Royal Academy. It includes frescoes copied from the walls of Yugoslav monasteries and churches, since destroyed by the Germans. Some of the frescoes were discovered comparatively recently; for centuries they had lain hidden behind coatings of plaster with which "restorers" of Yugoslav churches had covered them. American museums, including the Brooklyn Museum, the Philadelphia Museum and the Toledo Museum of Fine Art, have shown their appreciation of the importance of the exhibition by lending exhibits of sculpture, paintings, costumes, and embroideries. The exhibition is open to the public until February 13, from Mondays to Fridays, 10 a.m.-5 p.m., and on Saturdays 2 p.m.-5 p.m.

Battle of Britain Memorial.

PROFESSOR A. E. RICHARDSON, A.R.A., F.R.I.B.A., is a member of a committee set up to administer the Westminster Abbey Fund for a memorial to the pilots who gave their lives in the "Battle of Britain," and to collaborate with the Dean of Westminster in plans for executing the work after the war.

Replanning Hull: Sole Appointment.

PROFESSOR PATRICK ABERCROMBIE is to continue alone with the reconstruction plan for Hull, in which he was associated with the late Sir Edwin Lutyens, President of the Royal Academy.

Dundee Housing Appointments.

MR. J. M'LELLAN BROWN has been appointed director of housing and city architect, Dundee, and Mr. Robert Dron appointed his deputy.

A Retirement.

MR. J. C. ROBINSON, F.R.I.B.A., has retired from his position as chief architectural assistant in the Borough Surveyor's department at Blackpool, a position which he has held since January, 1920.

The Royal Sanitary Institute.

MR. W. T. CRESWELL, K.C., Hon. A.R.I.B.A., has been re-elected Chairman of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board.

Professional Announcement.

MESSRS. DAVIS & BELFIELD, chartered quantity surveyors, of 4, Harley-road, N.W.3, announce that Mr. R. L. Everest, F.S.I., previously in practice at 13, Lower Belgrave-street, S.W.1, will be joining the firm as a partner. They will shortly be moving from their present accommodation to permanent offices. On and after January 29 the name and address of the firm will be Davis, Belfield and Everest, 9, Ashley-place, Westminster, S.W.1. Tel.: Victoria 5311/2.

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COMING EVENTS

Tuesday, February 1.

HOUSING CENTRE.—Dr. Fenton on "House Conversion into Flats: Need for Legislation to Secure Satisfactory Results." 13, Suffolk-st., S.W.1. 1.15 p.m.

Wednesday, February 2.

THE BUILDING CENTRE.—Exhibition of Swedish factory-made houses. Opening by Mr. A. C. Bossom, M.P. Maddox-st., W.1. 12 noon. (Open until February 26, 10 a.m. to 4 p.m.; Saturdays, 10 a.m. to 1 p.m.)

DESIGN AND INDUSTRIES ASSOCIATION.—Mr. John Gloag on "Selling Power of Good Industrial Design." Royal Society's Rooms, Burlington House, W.1. 1.30 p.m. (Buffet lunch at 12.45 p.m.)

ROYAL SOCIETY OF ARTS.—Mr. E. C. Goldsworthy on "Light Alloys in Post-War Britain." John Adam-st., W.C.2. 1.45 p.m. (Buffet lunch, 1 p.m.)

Thursday, February 3.

TOWN PLANNING INSTITUTE.—Mr. John Dower on "Planning and the Landscape." Essex Hall, Essex-st., W.C.2. 2.30 p.m.

Saturday, February 5.

ECCLESIOLOGICAL SOCIETY.—Mr. A. G. R. Buck on "Font Covers." St. Martin's School of Art, Charing Cross-rd., W.C.2. 2.30 p.m.

INSTITUTE OF QUANTITY SURVEYORS.—Mr. W. T. Creswell, K.C., on "Powers and Obligations of the Quantity Surveyor." County Hotel, Carlisle. 1.15 p.m.

ASSOCIATION OF BUILDING TECHNICIANS.—Film Show. At 1, Basnett-street, Church-street, Liverpool. 3.30 p.m.

From *The Builder* of 1844

Saturday, January 27, 1844. Price 3d.

City Improvements.

He thought it due to the Committee to state that, after a period of 20 years, during which it had existed and expended upwards of two millions of money in the erection of the bridge [London Bridge] and the formation of its approaches, the present was the first time it had come to the Court to state any deficiency in its estimates (cheers).

It considered that a surplus would remain sufficient to carry out the great object of making a street from the Bank to the Post Office. The conduct of the Bank of England was, he regretted to say, in direct contrast to the liberality which there had been reason to expect from such a body . . . everything had been done by the establishment to which he alluded to shew their indifference to the exertions which had already been made. . . . He felt that the Court were determined to do justice to the labours and construction and integrity of the Committee. (Loud cheers from every part of the Court.)

*** The proposed street which was the subject of the report to the Common Council, quoted in our extract, was presumably Lothbury.

THE R.I.B.A. AND NATIONAL PLANNING

SCHEME OUTLINED AT ARCHITECTURAL ASSOCIATION

THE Central Advisory Committee of the R.I.B.A. were the guests of the Architectural Association on January 11, when the Committee's views on the National Plan which they are now preparing, in conjunction with the Allied Societies, were outlined. After being welcomed by the President (Mr. A. F. B. Anderson), Mr. A. W. Kenyon (Chairman of the Committee) took the chair, and outlined the purpose of the meeting.

I should like to explain (said MR. KENYON) why the R.I.B.A. has taken up this approach to national planning, because it may be misunderstood in some circles. People are apt to say: "You cannot plan the whole of Great Britain; this is a matter which requires the combined efforts of many different groups of people, and therefore we should leave it alone." The Committee are very alive to this fact; not only do we welcome all shades of thought, but we are making use of the great amount of research which has already been done. It would be wrong, however, for us to refrain from doing our part also. We are also told that this is a matter for local authorities, each dealing with its own area. They certainly have a big task, and we do not desire to interfere in the least with their efforts; but they are confined geographically by their boundaries, which they cannot overstep, and therefore they can plan only within them. On the other hand, we have no boundaries. We have new problems before us in education, health, work, recreation, building methods, transport, and, therefore, planning, and it is therefore our endeavour to take these new conditions and work them into a harmonious and pleasing pattern. We architects have a task to perform, and therefore we have the same right to be heard as any other body in the community. We are limited only by ways and means, and not by ability. The R.I.B.A. has sufficient faith in its members to call upon them to do this work of preparing the ground and putting into order the things which have to be done first. The response—the voluntary help which has been offered, calling for a great amount of self-sacrifice—not only is gratifying to the R.I.B.A., but will be appreciated by the whole nation as an unbiased attempt to improve the country of which we are so proud.

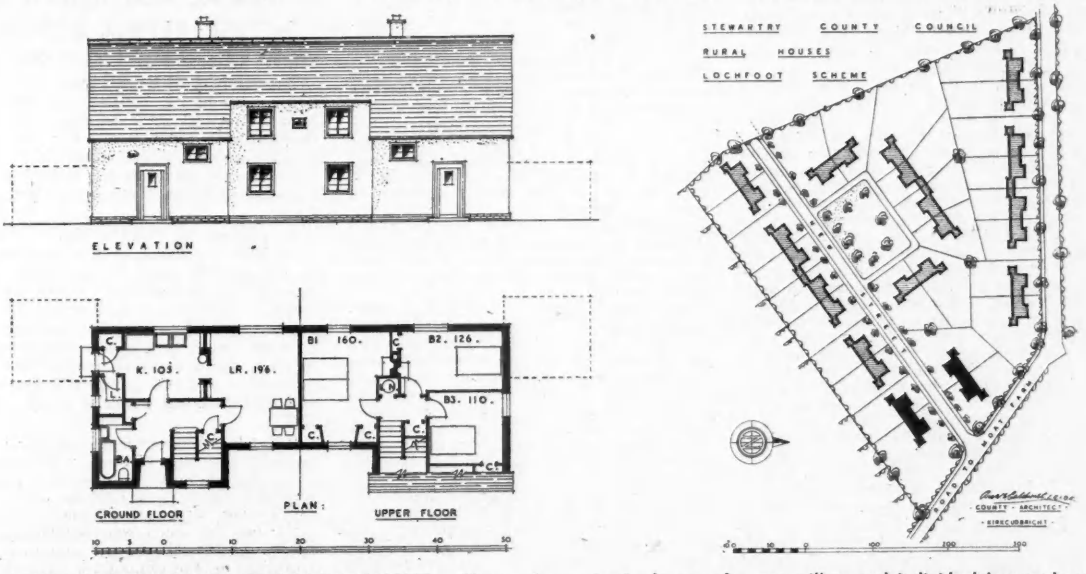
MR. H. T. SEWARD, F.R.I.B.A., outlined the growth of a big city (Manchester), and showed how it is dependent on port facilities, trunk railways, trunk roads, and trunk canals for its economic transport. Manchester, like other cities, had grown because of its transport system. "Economic transport," said Mr. Seward, "can only be maintained, with the ever-increasing volume of road traffic, provided we have an improved road system. This aim will only be achieved by planning on national lines, and the benefit of improved transport communications will have far-reaching effects on the national economy."

The National Plan and Official Architects.

"How a national plan would assist the official planner," was dealt with by MR. A. L. ROBERTS, F.R.I.B.A. (County Architect of Hampshire and President of the Allied Societies Conference). The question of communications between important centres (said Mr. Roberts) has several bearings on the work of a county architect. I may, for example, select a site for an important group of buildings, perhaps in connection with some future housing development, and then find that the Government propose to run a road right through the site. This leads to delay, and we may lose an opportunity of which we might otherwise have taken advantage to choose a site which would be clear for our development. A national plan will help to prevent mistakes of that kind. As far as official architects are concerned, if they will take an interest in the work, they can make a substantial and helpful contribution to this somewhat delicate and difficult problem.

"The influence of industry in a balanced Britain; should industry move? The effect of transport on the movement of industry"—these subjects were dealt with by MR. HENRY BRADDOCK, A.R.I.B.A. (Hon. Secretary, Central Advisory Committee), who said: The most difficult part of the problem of devising a national plan lies in the provision to be made for industrial development. The Barlow Report has exhaustively examined this problem from almost every angle. Every architect will have no difficulty in understanding the significance of the need for a plan which is complete and homogeneous, for these two qualities are the backbone of any plan. The supposition that planning applied to each town, each area, and each region can successfully overcome the problem facing us, particularly with regard to industry, is incorrect. Industry is at all times dependent upon the supply of labour, materials, power, and transport, and where one goes the others must follow. It is this simple fact, and the policy of non-interference with the location of industry, which have undoubtedly been responsible for the uneconomic expenditure and the spoliation of the countryside in providing the services needed for these industries. Industry is not backward in demanding services from the community in the use of roads and the provision of public services, and it seems reasonable to suppose that some preconception of its location would be an advantage.

"The health of the community and medical services in a properly balanced State," was dealt with by MR. E. ROCK CARLING, F.R.C.S. Eng., who said: You know that the Government are committed to providing a comprehensive medical service for the whole community, and it so happens that I have been intimately concerned with the preparatory survey. The functions of a medical service are three: the promotion of health, the prevention of disease, and the care and cure of the sick. The promotion of health involves at least six duties. The first is an adequate supply of the proper kind of food; the second is an adequate supply of pure water; the third is provision for the proper collection and disposal of waste and sewage; the fourth is the provision of dry, weatherproof, convenient, well-



A NEW VILLAGE, LOCHFOOT, KIRKCUDBRIGHT. Shown above are the layout of a new village and individual house plans and elevation of the two pairs of cottages already built. These are the first houses to be erected under the rural housing scheme in Scotland, and were opened on December 28th by Mr. Joseph Westwood (Under-Secretary of State for Scotland). The layout and plans are by the County Architect of Kirkcudbrightshire, MR. A. R. CALDWELL, L.R.I.B.A.

lighted and well-ventilated dwellings, in good air and light; the fifth is the provision of proper premises for all kinds of work; and the sixth is facilities for recreation for body and mind—what we might call habilitation and rehabilitation.

Every one of those requisites for the promotion of health is already so thoroughly in the minds of architects that I need say very little about them except this, that when your ideas are translated into fact there will be far less for the other two functions of the medical service to do. I say "every one of those requisites," and that includes food. I suppose that, considering all ages of the community, the most important of all foods is milk, and the milk of this country is dirty. The buildings in which cows are kept and dairying is done are very often out-of-date, ill-designed, dilapidated, and totally incapable of being kept scrupulously clean. I should like to see posted on every village notice-board a plan, an elevation, and a picture of buildings which could be kept perfectly clean and which are suitable for the production of the most important food that the community needs.

Prevention of disease is so largely an individual matter that it hardly affects the architect at all, except perhaps in some aspects of building at seaports and airports, and so we come to the care and cure of the sick and injured. Here I want to see an organised network of this kind. I want to see a health centre for every 10,000 of the population, a home or domestic hospital for every 20,000, a district hospital for every 200,000, and a headquarters hospital for every 2,000,000. Why? Because the first contact of the sick person with his general practitioner, the foundation of all good treatment, ought to excite an awareness in the whole hospital system right up to the top. The provision of such a system as that on a simple plan, varied according to local requirements, will be a task for architects for at least a generation to come.

As for the voluntary hospitals, nearly all are an agglomeration of additions, adaptations and improvisations which have made a perfectly hopeless plan. Then nearly every one of the municipal and county hospitals is on or next to the site of the old workhouse. Some of our public assistance institutions date from 1836, and a great many more from 1870, and over all of them there is still the slur of the workhouse.

In the generation to come we have to effect a fusion in almost every city of this country, except the very largest, of the voluntary and the municipal hospitals. We have here and there an unlooked for and an unhoped for opportunity, for the blitz has destroyed many hospitals. I want to make an appeal to architects. The vast majority of our hospitals ought to be pulled down or converted to other uses. What I want architects to do in almost all our big towns is to look on the immediate periphery of the town for a 100-acre site, and, having found it and ensured through the planning authorities that the roads, sewers, water, gas, and electricity supplies and transport will be adequate in time to come, I want them to put up in the office of every town clerk and every medical officer of health a plan of what should be done on that 100-acre site. Let these people know what they can have, because they are going to be tempted to spend from £20,000 to £100,000 on patching up inadequate, unsatisfactory buildings which cannot be made first-class.

"The effects of good planning on the lives of the community," was dealt with by MR. BEVERLEY BAXTER, M.P. I should like (said Mr. Baxter) to ask one question: Are your services actually being mobilised now, or is most of it talk? (Cries of "Talk!") I do not mean talk on your part, but on the Government's part. I have a suspicion that if the war stopped next week the local authorities would not be ready and the architects are not being used. If I were you, I should make a big row about it and try to get Members of the House of Commons to support you, because I believe that unless the man on the drawing-board can get to work now we are going to find ourselves like a dog chasing its tail when the war is over, and even Lord Woolton will not be able to do much about it.

Speaking on "Holiday, coastal and cathedral towns; spoliation of the sea-coast; towns built for holiday and pleasure," MR. JOHN L. DENMAN, F.R.I.B.A. (Deputy Chairman, Central Advisory Committee), mentioned that every horrible shack and hovel on Shoreham beach was blown sky-high in a single night in 1940. All gratitude to General Montgomery, then G.O.C., South-Eastern Command, for that generous act! But it took the threat of invasion to achieve it. In making use of our coastline decency combined with efficiency and imagination in planning and building, as the late Mr. Wesley Dougill so admirably stated, is the only common denominator possible. This can best be achieved by some form of national control, and I understand that the Ministry of Town and Country Planning is studying the allocation of the whole of the coastline for its most suitable purposes, such as for recreation, agriculture, industry, shipping, boating, bathing, and open spaces. The ideal policy would be the reservation of a belt of open space along the coast and in the valleys which open from the coast (a most important matter), which would be kept free in perpetuity of any erections other than essential buildings, for the benefit of the public, the belt varying in width according to the topography and the utilisation of the land.

DISCUSSION.

MR. A. E. EBERLIN (Notts Society of Architects) said the hoped-for lead from the Government on the planning and location of industry had not come, and therefore architects must try to do something themselves. Meanwhile, industrialists were buying sites and getting ready for the post-war period. It appeared therefore that the industrialists were thinking even further ahead than the planners, which seemed to be the wrong way round.

MR. STANLEY HAMP (Vice-President, R.I.B.A.) said that as a member of the Committee he would like the Chairman to have said more about what was at the back of their minds in the preparation of a plan. They had undertaken a very big task, but they realised the necessity for a plan covering the whole country. Nothing of that kind existed at present, but it must exist if what had been described that evening was to be carried out. The Committee were getting the help of all the allied societies, and local architects were busy providing the information which only they could give and producing plans which should be very valuable.

MR. PERCY THOMAS, P.R.I.B.A., who summed up the discussion, said: With regard to the Institute itself, and why we do this work, we know very well that it is not going to be the plan which any Government Department is going to adopt as the plan to work to. We hope, however, that it will be useful to every Department of the Government connected with planning. We feel that we as architects have a contribution to make in this respect. The final work must be the work of many hands and heads—the Ministry of War Transport and the Municipal and County Engineers will all have to play their part, but as nobody else set out to give a lead, we architects have done so. I look on architects, to use a modern term, as the pathfinders to prosperity, and I hope that we shall always be so.

OBITUARY

Matthew J. Dawson, F.R.I.B.A.

We regret to record the death of Mr. Matthew James Dawson, which occurred on December 23 last. Born in 1875, he was educated in Scotland and Sydney, N.S.W., and received his architectural training at the A.A. Schools and in the *Atelier Laloux*, Paris. He travelled extensively in France and Italy, and had won both the R.I.B.A. Travelling Studentship and the Soane Medallion. Though Mr. Dawson designed much architectural work, his greatest interest lay in teaching. He held successively the posts of lecturer in the L.C.C. Camberwell School of Arts and Crafts (1906-1912), the L.C.C. Westminster School of Arts and Crafts (1912-14), while from 1918-20 he was in charge of the School of Architecture, Cambridge University, under the Slade Professor. From 1927-29 he was Principal of the School of Architecture, Brixton School of Building, and from 1929-39 Senior Lecturer at the Bartlett School of Architecture, University of London.

Though he did not begin architectural practice until 1918, he reached the finals of the London County Hall competition in 1907, and had helped in the design of the Central School of Arts and Crafts, Southampton-row, from 1905-07. His buildings included houses and a bank at Hampstead Garden Suburb, banks (for the National Provincial) at Fulham and Croydon; the Mayfair Club and the Golders Green Club; flats at North Court, Wood-street, and Bray House, Duke of York-street, S.W., and at Basingstoke; the hotel at Burgh Island, near Plymouth; offices at New-street-square, E.C., and much else. Since 1941 he had been acting as an officer in the L.C.C. War Damage Survey Department. He became A.R.I.B.A. in 1907, and Fellow fourteen years later. He joined the Town Planning Institute as Associate Member in 1920, and was a member of the Art Workers' Guild and of the A.A. A gifted artist, Mr. Dawson had exhibited water-colours at the Royal Academy and had also shown illuminated MSS. at the Arts and Crafts Society.

LOCAL AUTHORITIES' HOUSE REPAIR SCHEME

LIMIT RAISED FROM £250 TO £500.

THE Minister of Health (Mr. Henry Willink), opening a housing exhibition in Manchester, last week announced that the Government, after consulting the local authorities, had decided to raise the present limit on the cost of repair and conversion of houses and completion of partly finished houses.

At present, local authorities can spend up to £250 per house, or £200 per dwelling in the case of flats or tenements. The limit is now to be raised to £500 for each house, or £400 for each dwelling. Private owners wishing to spend more than £100 on repair work in any year will still have to apply for a building licence; but local authorities will assist owners to get labour and materials for essential work up to £500.

"Until we can start building new houses," said Mr. Willink, "we have got to concentrate on keeping existing property in repair and in occupation; and this higher limit will help local authorities to make the best use of the small amount of labour which is available at this stage of the war. But before long I hope that we shall be able to begin work on the preparation of sites for new houses—such as levelling, and construction of roads and sewers."

CORRESPONDENCE

Architectural Appreciation in the Schools.

To the Editor of *The Builder*.

Sir,—Certain sections of the daily Press expounding the principle of Mr. Butler's Education Bill content themselves with giving only three channels of developing the natural aptitude—academic, scientific and technical. The artistic channel is omitted. This omission, significant and unfortunate though it be, is comprehensible, being due perhaps to the profound interpretative confusion existing round the words "art" and "artistic." Where does architecture fit in?

The question of appreciative education is one of serious moment for architects, and the issue is in reality quite simple. It concerns the training of the eye to correct visual values with constant regard to practical application, which values give colour and infuse life to all things, be they academic, scientific or technical. Such values as harmony, balance, unity, symmetry and asymmetry, sense of scale, repetition, contrast and variety in visual form are left to subconscious cultural assimilation in the present theme of State education, with scant attention to constant practical application. Scant, in that it is relegated to such institutions known as schools of "art" possessing indefinite ideology, insufficient powers and no common compulsion of attendance as part of the general cultural syllabus.

Few people see correctly or with any power of practical analysis, for if they did we should not be confronted with such travesty of distorted form from buildings down to common objects of everyday use.

Increase the chances of developing the natural aptitude—academic, scientific or technical—by all means, but overlook the fourth and you must produce, however efficient, a colourless and lifeless future generation indifferent to the truest spiritual significance of any New Order embodied in our new cities and national plan. This last depends solely on general correct visual appreciation to live and thrive.

Unless the profession desires for all time to combat on unequal terms indifference to things of beauty, a definite programme should be framed to see and insist that children are taught to see correctly, applying constant practical analysis to what they see, from the time they enter school to the day of departure. If this is done, there is hope for architectural appreciation in the future.

N. Martin-Kaye, F.R.I.B.A.

Land for Housing.

To the Editor of *The Builder*.

Sir,—In the report of the Joint Conference on Housing and the Building Societies appearing in your issue for January 14, though most of the problems have been considered, one looks in vain for any direct reference to the land.

It being a conference of bodies primarily concerned with the building of houses by private enterprise this is certainly one of the matters which should not have been overlooked.

We are not yet aware of the Government proposals, but we understand that town planning proposals will rightly contain restrictions as to what land can be zoned for housing, where we shall have our green belts, new roads, industrial areas, local dairy producing land, shopping areas, public utility zones, etc., and subject to more restrictions regarding services the rest may be used for housing.

By the provisions of the Uthwatt Report (if acted on), local authorities may compulsorily purchase land for houses, not only for present but for future requirements, and it is laid down that "no account shall be taken of any increased value arising from the actual or possible demands for the land by any Government Department or local authority."

It may be that the local authority will purchase all the most suitable land at a price below the market value, and, as the landowner will be unable to "develop" some of his land and will have received a low price for that purchased by the local authority, he will look for his profit to the land he is able to sell on the open market.

With the prospects of dear land, unsuitable and uneconomic sites, and a Government subsidy given for the houses built by the local authorities, it looks as if the dice were loaded against private enterprise.

We realise that post-war housing, especially in the initial stages, may to a large extent have to be carried out by the local authorities, and whilst we are anxious to give the public a square deal we want to be given fair competitive terms. Incidentally, knowing something of the houses that have been built by some local authorities, one wonders if their houses are going to conform with the standards set down by the National House Builders' Registration Council.

Harry Spencer.

Preston.

"Building Employers: a Plea for Unity."

To the Editor of *The Builder*.

Sir,—We builders are on the eve of the biggest task ever to be undertaken by the second largest industry of the country; every man, woman and child looks to us as never before. Therefore, let us at once set ourselves the task of complete unity (we have never had that yet), starting with a meeting of the Presidents and Councils of all organisations directly connected with the trade, working up to a crescendo of unity.

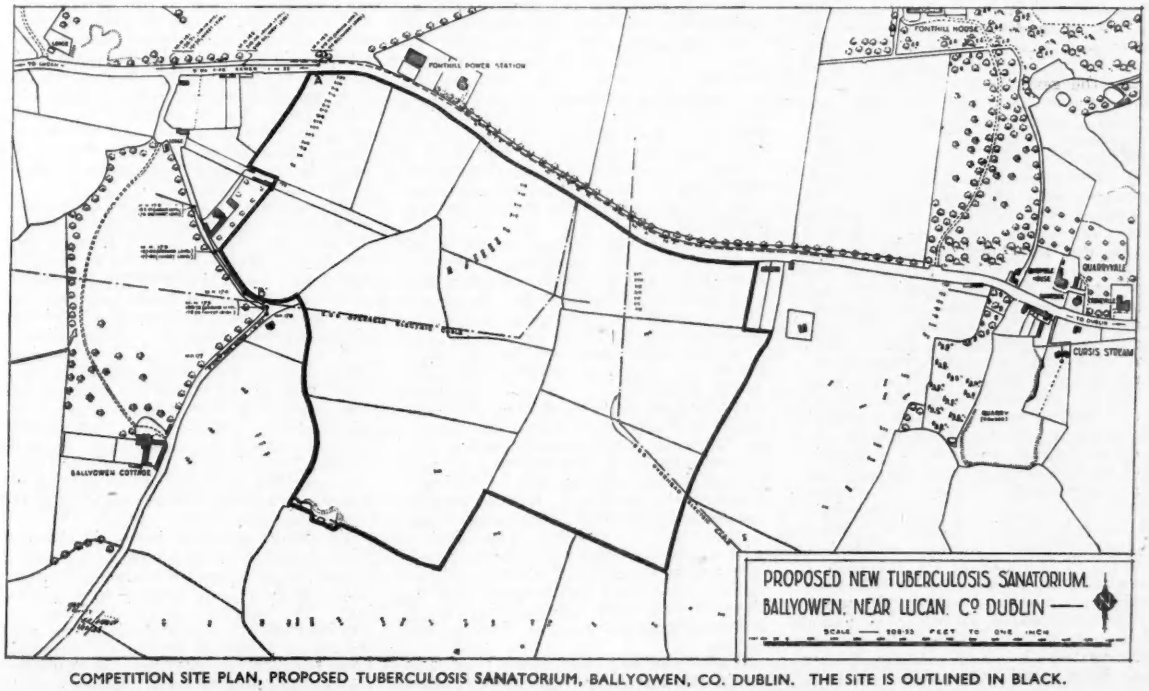
C. & F. Bryen.

London, N.6.

COMPETITION NEWS

NEW TUBERCULOSIS SANATORIUM, BALLYOWEN, CO. DUBLIN.

Details of a competition (open, amongst others, to members of the R.I.B.A. and all registered architects) for plans for a tuberculosis sanatorium to accommodate 320 patients at Ballyowen, Lucan, Co. Dublin, were given in our issue for January 14. Premiums of £500, £350, £250 and £150 are offered. The site plan is reproduced below. The scheme is estimated to cost not less than £350,000. Conditions (deposit £3 3s.) are obtainable from the City Manager & Town Clerk, Public Health Department, Municipal Buildings, Dublin. Questions will be answered before July 21 next, and the closing date is June 30, 1945. The assessors are Messrs. Harry Allberry, Vincent Kelly, J. M. Easton, Ralph Byrne and Dr. A. J. Walsh.



COMPETITION SITE PLAN, PROPOSED TUBERCULOSIS SANATORIUM, BALLYOWEN, CO. DUBLIN. THE SITE IS OUTLINED IN BLACK.

SCIENCE AND THE ART OF LIGHTING

DEBATE AT THE R.I.B.A.

A JOINT meeting of the Illuminating Engineering Society and the Royal Institute of British Architects was held on Tuesday, January 18, at the R.I.B.A. Mr. Percy Thomas, O.B.E., LL.D., P.R.I.B.A., presided.

MR. ALISTER MACDONALD, opening the debate, said the R.I.B.A. realised that science had come to stay and that architects must set themselves to understand where science could help them and that it wished to be a handmaiden, not a dictator.

Artificial lighting was one of the most important considerations in the planning of a building. He was thinking not only of the palace but of the cottage, if it was lucky enough to be on the grid. A building was only really habitable if it had good lighting. He showed on the lantern screen some examples of good and of bad lighting of the same building. In the good old days when baronial halls were lighted by candles and torches, science had little place in the art of lighting. Lighting effects were more simply obtained, because the materials at hand were simple. People did not work much under artificial light in those days. He believed that the City Guilds had an ordinance prohibiting craftsmen from working in the evening on account of the danger to their eyesight. Then glass came in, both as a decorative and a reflective agent, and then mirror glass, and then new techniques appeared over which the artist could not maintain complete control.

MR. R. O. ACKERLEY said Mr. MacDonald had suggested that the architects in the old days had a rather simpler problem in dealing with lighting. It was true that the problem of the present-day architect in this respect was something quite different from what it was in the time of Wren, and during the last fifty years particularly there had been a tremendous development in light sources. The old architect had no illuminant available with which he could really make a "splash," and therefore he was free from present-day dilemmas. He was rarely troubled with glare, because there were really no glaring light sources. The room in which they were then assembled would have been lighted by 6,000 candles, but to-day those 6,000 candles could be compressed into 24 points, and with such compression, glare and other problems came in.

He went on to suggest by a few demonstrations with ingenious models that science really did come into lighting. Thus he showed by means of a small model of a room and the indicator scale of a photometer how materially the total lighting was affected by dark or light schemes of decoration and by the use of a direct or indirect illuminant. The point which the architect always had to decide was what illumination was required in a given space. All sorts of factors determined the amount of light obtained in a given room—the fittings, the surrounds, and so forth. While the decorations made a difference with any system of lighting, they made a much greater difference with one system (indirect) than with another. The aim was to secure a distribution which did not give excessively uneven lighting and which correctly revealed the articles on the wall or on the table or elsewhere as required. He illustrated again by a model how differently a relief panelling appeared according to various directions of the lighting. There were three partners in seeing—namely, the eye, the light, and the object—and by arranging the light in relation to the object advantage could be taken of its qualities, while its blemishes could be largely eliminated.

The lecturer practised what might have seemed conjuring upon various articles, such as a piece of velvet, by way of showing the transformation in their appearance according to the way in which the light fell upon them.

The degree to which lighting could be controlled, said the lecturer, depended to a great extent on the amount of space available. Lighting engineers had been accused of thinking that buildings were designed for the purpose of housing lighting fittings. If the space required was going to spoil the building the engineer had to give way, but he was bound to explain what would happen if he did not get his space. The lecturer proceeded to show that there was a definite relationship between the distances at which lamps could be placed behind glassware in order to achieve a reasonable uniformity on the glazed surface. This, again, varied with the character of such surface. Reasonable uniformity was to be obtained either by close spacing of lamps or by placing the lamps farther back. He agreed with Mr. MacDonald that the lighting engineer must be the servant of the artist, and there might be times when, in order to get the desired results from the lighting engineer's point of view, both engineer and architect wanted to put in equipment which was so big and unsightly that it condemned itself straight away. He suggested that in that case, if the architect understood the background of the lighting engineer's problem, he would be able to effect the necessary compromise.

Artistic Control of Light.

MR. MACDONALD thanked Mr. Ackerley for demonstrating the kind of things which were meant by the science of lighting. He stressed the point of economic cost. It could be seen from the photometer readings which they had been shown that some excellent results could be obtained by a very small additional expenditure of light. Nevertheless, all the achievement of which they had just heard required to be moulded into something human. With a hundred engineers in that room as the guests of the architects, he ventured to say that most of their lighting schemes prepared purely on scientific lines would be failures in buildings of any creative quality. It might be thought that he was envisaging so-called architectural buildings, but he included the factory and the workshop.

There were really two persons concerned in the lighting of a building. One was the scientist and the other the artist, and each had his own job to do. He should know his own job thoroughly, so that the co-operation between the two might yield a perfect final result. He showed a further selection of slides illustrating good and bad lighting. One building which was over-lighted—"made naked," as Mr. MacDonald put it—was a Gothic church. Gothic architecture soared towards the heavens, but this building was so well lighted, in its upper as well as its lower spaces, that there was no room to imagine heaven. On the other hand, classic architecture stood up well to a great deal of lighting, which showed up its detail. Many other examples of good and of bad lighting were shown by the speaker, among the examples of good lighting being certain entrance halls of London Underground stations.

Science, he said, would only take us so far in this matter and no farther. There was still need for the exercise of some mysterious quality which pulled it all together. This business of interpreting the human element was the function of the architect. The architect provided the setting in which to show the engineer's work to the greatest advantage, and yet, to show it to the greatest advantage, as the Irishman might say, the engineer's work had to be lost. Finally, he asked Mr. Ackerley whether he could conjure up the architect who had no appreciation of the scientific principles involved. Had he ever met such a man?

MR. ACKERLEY replied that he had met such an architect. He was the man who worked out the whole of his room space before he thought about the lights at all. Probably he kept his cornice very small, and then at the last moment found that he could not light his frieze without lamps and sought the help of a lighting contractor, with a demonstrably bad result.

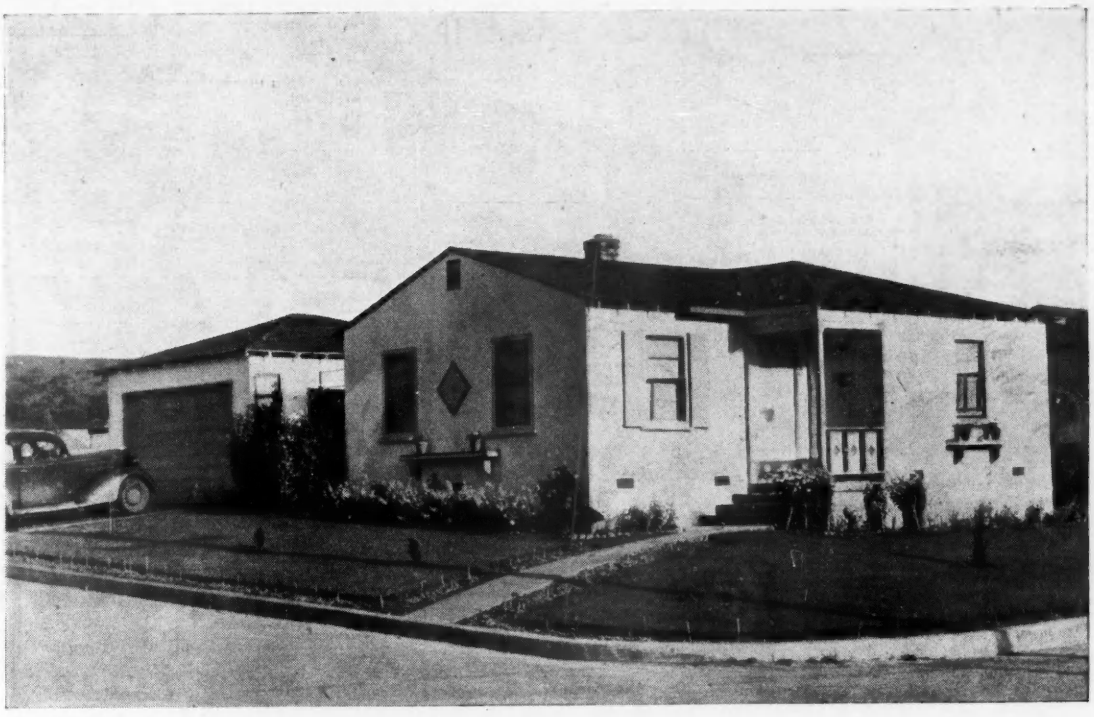
MR. MACDONALD retorted that the engineer would take out his slide rule, find the co-sine of the angle, and get a result which could be scientifically defended, but yet lacking in the mysterious human quality of which he had spoken.

Both debaters then experimented with the lighting of a cornice, and after endeavouring to get an even illumination on a straight surface, decided, in MR. ACKERLEY'S words, to call for a compromise between the architect and the engineer, and to put in a curved cornice, thus obtaining a good lighting effect.

MR. MACDONALD said Mr. Ackerley had incautiously remarked that the best things in life were the result of compromise. Yet the word "compromise" had an unfortunate ring. What about a compromising situation? The word was not "compromise," it was "balance." Correct balance must be the ideal if the finest results were to be achieved. In order to maintain equilibrium, there must be on every occasion equal and opposite reactions, so that the solid lighting requirements of a room did not overrun comfort, maintenance costs, and the effectiveness of the scheme. Similarly, the design of the illuminating engineer must not be so muffled by the architect that the lack of effective lighting was always felt. To the engineer he would say that if his scientific requirements created a jarring effect they were not right in relation to the building. In other words, they were lighting a room, not a certain cubic space. To the architect he would say that, however artistic the appearance of the room might be, that effect was short lived if it caused discomfort to the occupier.

MR. ACKERLEY'S last word concerned the different background of the architect and the engineer. The engineer's training was strictly objective. He started off with a light source, and knew what happened when that source was badly controlled or was uncontrolled. He knew that he would get patchiness, contrasty effects, distortion, and he spent a lot of time learning to avoid these things, with the result, possibly, that at the end of his training he was inclined to make a fetish of even illumination, and to say that heavy shadows, and so on, were necessarily evil things. The architect's point of view was the opposite to all this; he was subjective, and was interested in what looked right to the average eye.

MR. MACDONALD, in closing the debate, said that they had shown that science played an important part in all this work. It provided the data common to all lighting. The lighting engineer took up the requirements of a particular building, and the architect put it in the architectural form required in order that that building might adequately function.



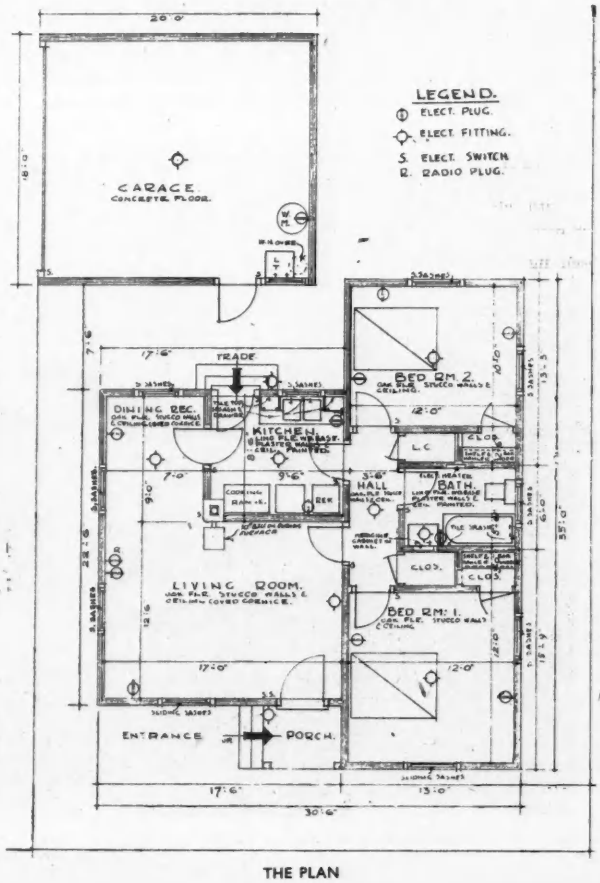
HOUSE WITH GARAGE, LA MEZA

LOW-COST HOUSING, CALIFORNIA, U.S.A.

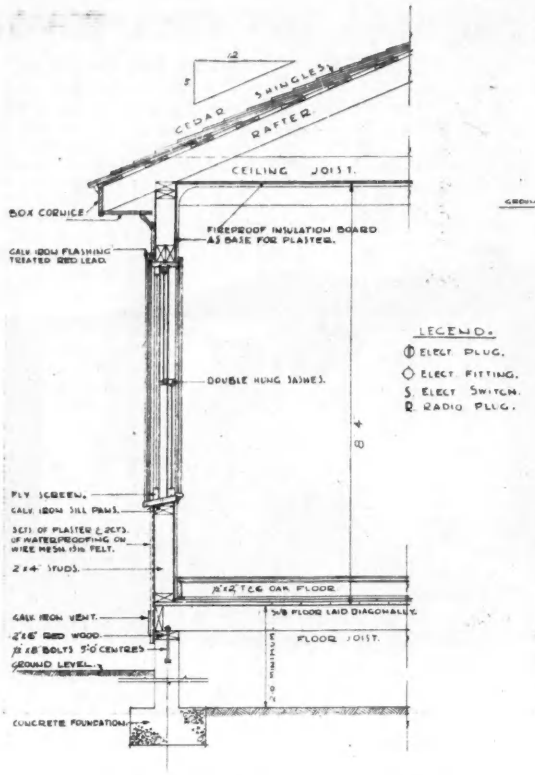
On the western side of the Rocky Mountains, overlooked by one of the largest observatories in the world (Mount Wilson), lies the Spanish-American city of San Gabriel, the site selected many years ago by Father Junipero Sierra for one of his chain of historic California Missions. San Gabriel, surrounded as it is by many miles of orange groves and rich fruit-growing and cattle-raising country, and lying about 15 miles from Los Angeles, has a special link with London, by reason of the developments carried out during recent years by Percy Bilton, Inc., a California corporation associated with the London firm of civil engineering, building and public works contractors Percy Bilton, Ltd.

This organisation has for several years been engaged in the development of large tracts of land, by erecting homes of typical California type. In a continent known for mass-production, it is surprising to find that its first large project of mass-produced homes on prefabricated lines was envisaged and operated on the west coast of America by this English organisation. In 1938 they adopted the prefabrication principle for erection of the first 100 houses built in San Gabriel village—the first batch of 50 homes being completed in seven weeks' time. Since then, many war-time projects all over the U.S.A. have followed on similar principles where wood frame and stucco buildings have been scheduled.

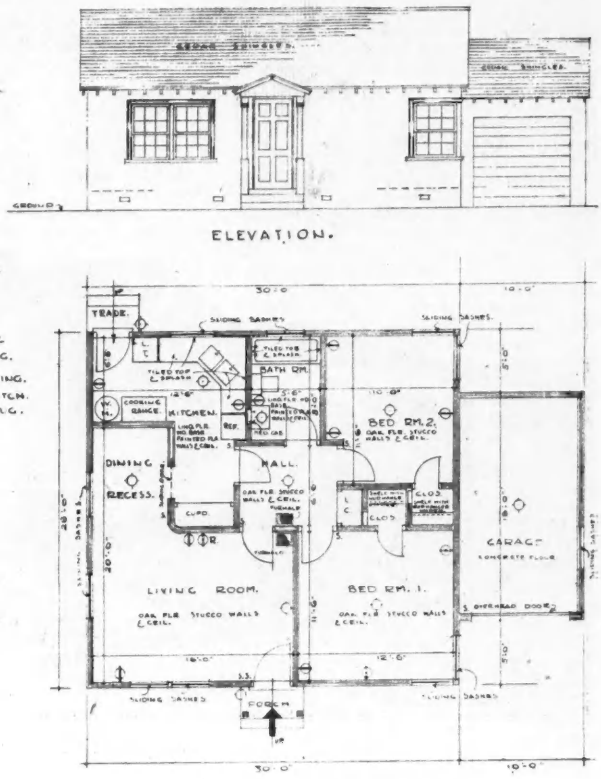
But first a note on the layout or, as the Americans say, the "sub-division of the tract." An area of approximately 160 acres was involved in the first development, for which the layout of houses had previously been approved by the housing authorities. The Bilton organisation changed this to a layout by which was created a self-contained village with hardly any motor-car hazards and with a central shopping centre. The "gridiron" layout adopted during the last century by American cities failed to foresee that each cross section ultimately became a pedestrian trap as automobiles became so general. In the new layout the land was



THE PLAN



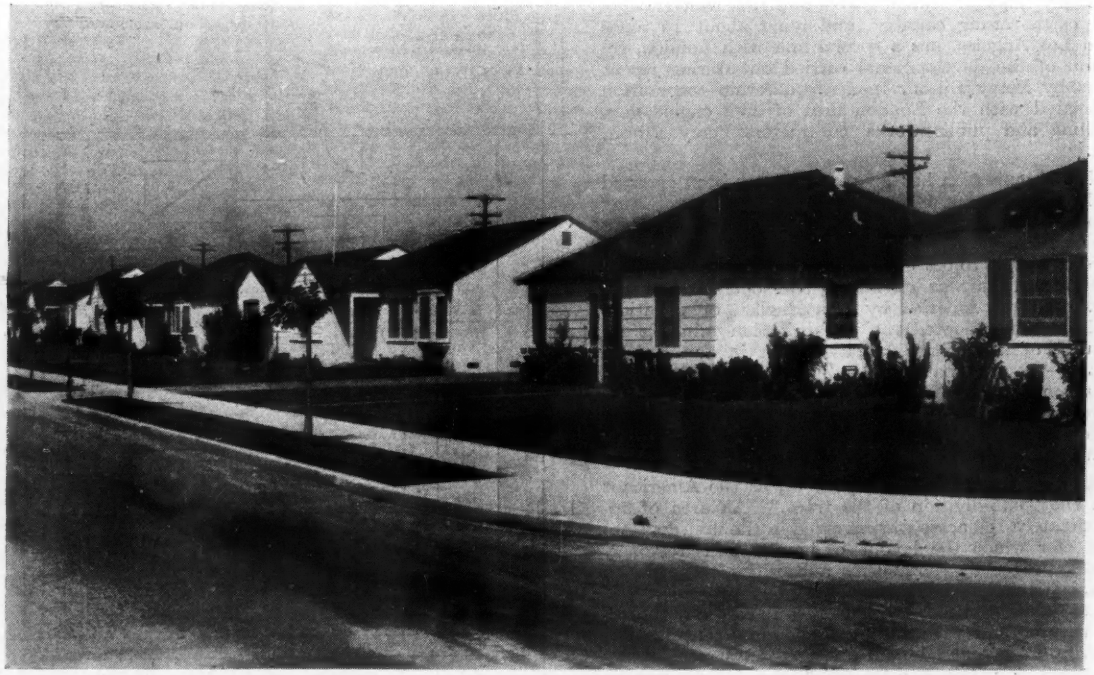
SECTION THROUGH WALL CONSTRUCTION.



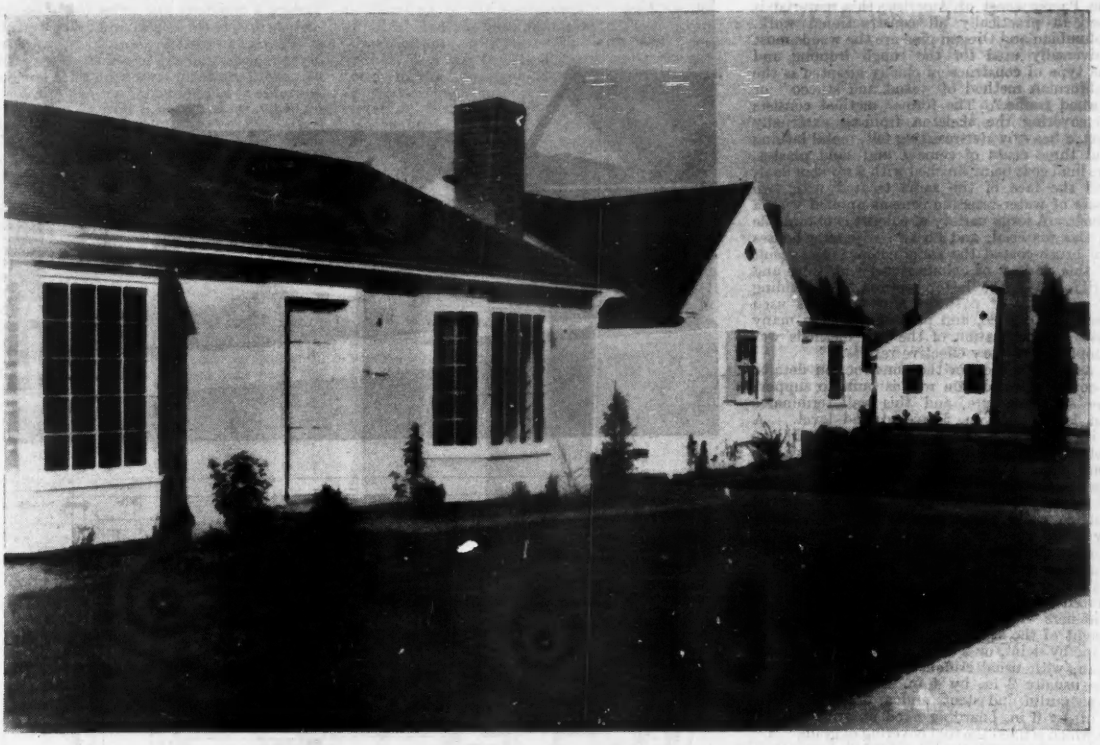
A TYPICAL HOUSE PLAN.

sub-divided into building plots varying from 50 ft. to 75 ft. frontage and 100 ft. to 150 ft. deep. The total number of houses provided for was approximately 1,000, and when completed will form a completely self-contained community with its own business and amusement centre. Concrete pavements are extended along the frontage of all lots for a width of 5 ft., leaving a grass verge 5 ft. wide between them and the kerb, which is planted with ornamental flowering trees.

The average set-back of the houses is about 30 ft.



A STREET IN SAN GABRIEL VILLAGE.



INDIVIDUAL HOUSES. *Below :* A TYPICAL VIEW, SAN GABRIEL VILLAGE.

from back line of pavement, and all the front gardens are left entirely open without any fences or railings, and the whole forms a large open lawn with beautiful flowering shrubs around each house, giving an air of spaciousness and a very pleasing appearance. Sprinkler systems are installed to the gardens of every house. As a protection against damage and loss of life due to earthquakes, houses in this district are necessarily of the one-floor, or bungalow, type, and all homes have garages built to accommodate two cars.

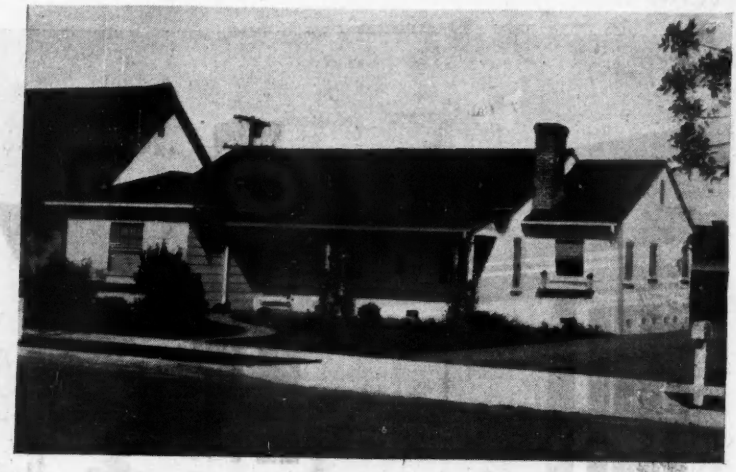
Owing to the plentiful supply of lumber on the Pacific coast of America, this material is used in practically all constructional work. Columbian and Oregon pine are the woods most universally used for the rough framing, and the type of construction chiefly adopted is the Californian method of "stud and stucco" or "wood frame." The former method consists of covering the skeleton framing externally with a heavy water-resisting felt, metal lathing and three coats of cement and sand plaster, the final coat being finished with a wooden float, and the face of the same treated with two coats of water-resisting cement applied with a brush. A large variety of colours is obtainable in this material, and no two adjoining houses are brush-coated the same colour; the result of this variety of colour is very pleasing and striking. In the latter method, wood siding of a variety of patterns and widths is used instead of stucco, and painted; and in many cases a combination of the two methods was adopted with very effective results.

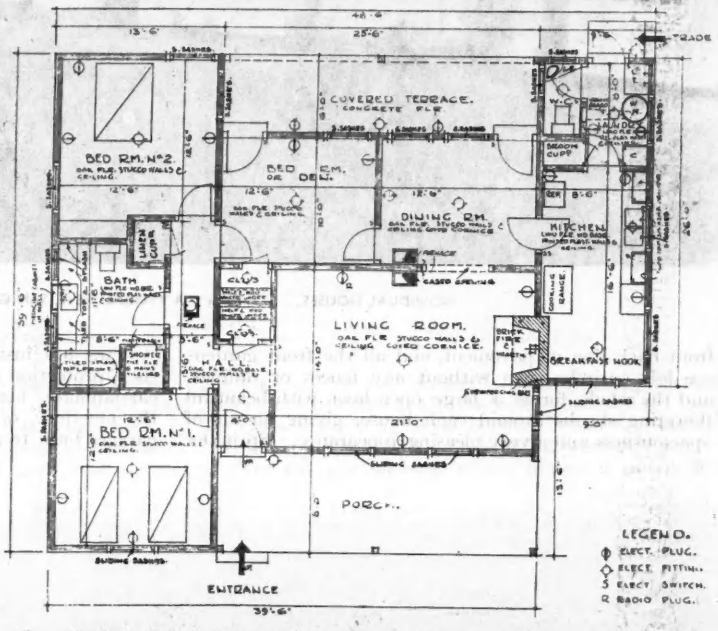
As will be seen in the construction details, a concrete foundation wall is built to support the superstructure, and this wall terminates not less than 6 in. above ground level. A 2 in. by 6 in. redwood plate or "mudsill" is bolted to the foundation wall and serves the dual purpose of a dampcourse and protection against attack by termites. The floors consist of 2 in. by 6 in. wood joists supported on the outside walls and internally carried on 4 in. by 6 in. wood girders supported on concrete piers. The sub-flooring is 1 in. by 6 in. rough boarding laid diagonally. The framing of the walls and partitions is of 2 in. by 4 in., securely braced with diagonal braces in addition to stiffeners or fire blocks in the centre of the height of the studs. Ceiling joists are usually 2 in. by 4 in., or 2 in. by 6 in., according to span, with usual stiffener over. Roof rafters are usually 2 in. by 4 in. with the ordinary type purlin and strut, and are sheathed with 1 in. by 6 in. boarding fixed at 9 in. centres, to which is fixed the roof covering of grade "A" cedar wood shingles laid 4 in. or 5 in. to weather, according to pitch.

The joinery work is made mostly from sugar pine. The finished floors to all reception and bedrooms and hallways are of oak polished, and those in kitchens and bathrooms are covered with linoleum with coved skirting next walls. A neatly moulded skirting is fixed around the base of all walls in oak-floored rooms, with a small rounded fillet next the floor, called base shoe, and all the corners have specially made rounded angle bases. The internal walls and ceilings are lathed with plaster-board or keyed rock lath, and are plastered two coats with a special local stucco. An interesting feature, and one which appeals greatly to the housewife, is the kitchens, where capacious cabinets with flush panelled doors are provided; the cabinet to the sink is surmounted with a neatly tiled draining-board and splash with rounded tiles round the edges of the sink, and a raised vitreous tiled capping along the outer edge of the draining board. In the larger and more expensive homes, a convenient breakfast corner is provided in each kitchen.

In the larger houses, each bathroom has an enclosed stall shower with glass door and tiled floor and walls. The tubs or baths are of the recessed or self-enclosed type with nicely finished tile base or splash next to walls. The lavatory basins are large and roomy, fitted with chromium-plated legs and towel rails. Over each lavatory basin is fitted flush with the wall a porcelain enamelled metal medicine cabinet with glass removable shelves internally and a mirror-faced door surmounted with an electric lighting bracket. All the toilet or w.c. fixtures are of the low-down type. A point worthy of note is that all soil, waste and service pipes are carried inside the stud framing, thus obviating the ugly appearance of exposed pipes.

Where fireplaces are provided, they are constructed in brick reinforced with steel rods as earthquake protection. The fire boxes are usually 3 ft. wide by about 2 ft. deep, lined with firebrick for wood burning, and the flues are lined with fireclay tiles. The surround to the fireplace including the hearth is usually of





Above: VIEW AND PLAN OF HOUSE, SAN GABRIEL VILLAGE, *Below:* ANOTHER TYPE.

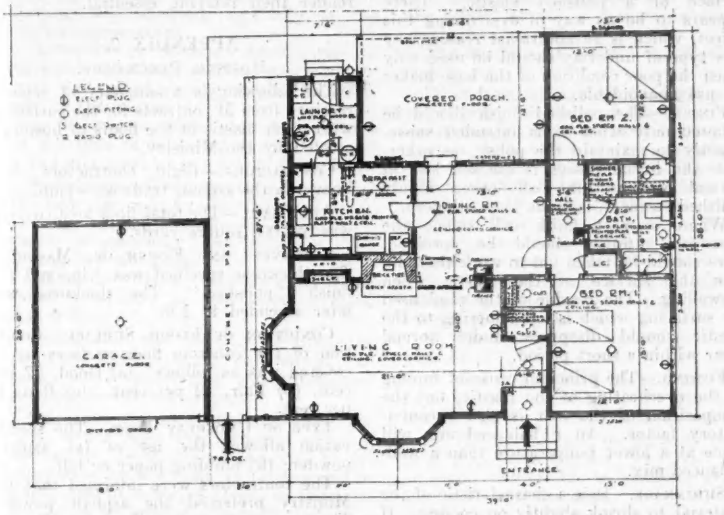
LOW-COST PREFABRICATED HOUSING, CALIFORNIA, U.S.A.

half-bricks called splits, obtainable in a variety of colours; every fireplace is fitted with a well-designed wood mantel. Heat generally is obtained from the use of gas-heated floor type, or dual wall and floor type furnaces, fired with the natural gas so common to California. Electric panel or wall heaters are provided in the bathrooms. A plentiful supply of constant hot water is provided by natural-gas-heated water heaters, of varying capacity according to the size of the house. As a safeguard against fire, all electric installations are carried in heavy metal conduit or flexible tubing and all switches and plugs are of the flush type.

In conceiving their plan of marketing the homes, the Bilton organisation catered for the low and medium class of wage and salary earners, and prices for the home complete with lot varied from $3,770 (£775) to $8,500 (£1,700). It must be borne in mind that American costs are relatively much higher than English; a £750 house would cost about £595 in England. The lower-priced type of home was built on the prefabrication principle, and in this connection the Bilton Corporation were the first to introduce this type of construction on the West Coast, which is now adopted in several States.

Purchase of the homes was financed by the Federal Housing Administration (a Government organisation) in conjunction with the large banks, and the fact that loans up to 90 per cent. of the appraised value were made to all purchasers at the low rate of 4½ per cent. interest, the loans to be amortized over a period up to 25 years, is an indication of the soundness of construction and the workmanship put into these homes.

We learn that, as a result of the work at San Gabriel village, the company were invited by the local area Directors of the Federal Housing Administration (F.H.A.), to extend their activities to San Diego in an effort to help meet the ever-growing demand for homes in that area required by the expansion of the aircraft ndustry. The company purchased large tracts of land in that area, which they developed by the erection of several hundred houses. Montemar Ridge is one estate; this was developed on similar lines to San Gabriel. Other estates were at La Mesa, where the smaller type of home (one of which is shown on page 75) was erected. Workers living on these estates produce "Liberator" and "Catalina" aircraft.



A TYPICAL HOUSE PLAN.

A KITCHEN, SHOWING THE BREAKFAST RECESS

LOW-COST PREFABRICATED HOUSING, CALIFORNIA, U.S.A.

COTTAGES FOR RUSSIAN LIBERATED REGIONS

By M. MAKAROV.

THE Academy of Architecture and many designing offices in the U.S.S.R. are working on new types of dwelling-houses intended mainly for the liberated regions. They are to be durable and cheap, and facilitate speedy construction.

An interesting project has been handed in by Arkady Mordvinov, the architect, vice-president of the Academy of Architecture, and head of the recently organised committee for architecture of the Council of People's Commissars of the U.S.S.R. He has planned a two-storey house resembling a cottage and containing five rooms, to be built of gypsum. Planned primarily for the liberated regions, such cottages can be put up in great numbers to alleviate the shortage of living quarters.

In a picturesque place on the outskirts of Moscow an experimental site is being laid out. The houses will be built, or rather put together, from ready-made blocks. The walls and other parts will be made of a special, highly durable gypsum, the roof of tiles, the stoves of brick, and the floors, windows, doors and staircases of wood. The complete work of mounting such a cottage can be accomplished in 20 to 25 days. Mordvinov, who has long experience in house construction, asserts that it is possible to build small houses entirely from gypsum, without any wood, cement or iron whatsoever. Such a house was recently put up in Ufa and is now inhabited. It remains to be seen how severe winter frosts will affect it.

Building workers are closely following these experiments. One of the plants producing building materials is manufacturing gypsum blocks, the material for which is prepared by a special process from natural gypsum. Large deposits of this are to be found in many parts of the country. Those near Moscow, for example, are estimated at millions of tons.

The architect, Dmitri Chechulin, head of the Moscow Soviet's Architectural Planning Board, is also engaged on the construction of two experimental gypsum houses, in which the walls, ceilings, floors and many details will be made of this material. Hot air from the heating system will circulate throughout the blocks. Chechulin's cottages, too, can be put up in less than a month. These experimental houses, when completed, will be visited by building workers from the regions under reconstruction. After studying the process of manufacture and getting the plans, builders will be able to proceed to the large-scale construction of cottages.

Proposed Children's Hospital, Dublin.

Plans are being made for the building of a children's hospital in Dublin which will contain 300 beds. A site has been selected in the Crumlin area. The architects are Messrs. Robinson and O'Keefe, Dublin, in consultation with Messrs. Easton and Robertson, of 54, Bedford-square, London, W.C.1.

B.S. Specifications.

Issued from 28, Victoria-street, S.W.1, are:—

B.S. Specification for Refuse Storage Containers (B.S. No. 1136: 1943). (Price 2s. post free.)

P.D. 202, Amendment to (B.S. No. 1062: 1943) Code of Practice for the Planning of Electrical Installations. (Free for stamped envelope.)

PITCH MASTIC FLOORING

M.O.W. EXPERIENCE.

THE Ministry of Works has issued some notes on its experience with pitch mastic flooring, which has been used in 31 hospitals carried out by the Ministry.

A note signed by Mr. H. N. Fisher, architect, and Mr. G. C. Wilson, A.D.W., states that the conclusions reached (see Appendix 1) have been discussed with the trade in committee during the drafting of the revisions to B.S. 1093. The final draft of these revisions is about to be circulated for general comment and contain : (a) A revised and tightened specification for the manufacture of the mastic; and (b) recommendations for laying.

With regard to (a), the revised specification will be technically an improvement on the present specification, but the proportions and nature of the pitch binder, fine and coarse aggregates, are still defined only within fairly wide limits.

Technically there are no reasons why the composition of the mastic should not be standard for the type of flooring required, but owing to the commercial difficulties of the trade it has been possible only to reach agreement within the present limits.

With regard to (b), the Ministry has been able to give the drafting committee the benefit of its experience (see Appendix 2) of this material, and most of the recommendations made by the Ministry's representatives in respect of laying are now embodied in the final draft recommendations.

Representatives of all the well-known asphalt firms attended the committee meetings.

APPENDIX 1.

CONCLUSIONS.

A.—FROM SUMMARY OF REPORTS RECEIVED FROM THE 31 HOSPITAL CASES.

THICKNESS.—The reports do not uphold the contention made by some contractors that pitch mastic cannot be satisfactorily laid to a thickness of ½ in. to ¾ in.

FINISH.—To obtain a satisfactory "polished" finish, continuous working must be maintained and sufficient labour provided to allow polishers to follow on layers.

UNDERLAY.—(a) Where a good base is provided it is not necessary to use an underlay of felt or paper. (b) Such an underlay is not essential as an insulator to prevent rapid cooling of the mastic. (c) If used, close contact of the mastic with the base is usually lost, to the detriment of the finished floor.

FUMING.—Strict temperature control is essential, as where the temperature for reheating the mastic is allowed to exceed 160 deg. C., fuming results.

AGGREGATE.—It is preferable for the coarse aggregate to be incorporated in the mastic at the time of manufacture. Where this is not done mechanically, agitated mixers should always be used for the reheating at the site.

B.—OTHER WORK.

Inspection of other work during the past 12 months confirms the above conclusions, and calls for the following additional comments :—

UNDERLAY.—An additional difficulty arising from the use of paper or felt is the reproduction of the lines of the laps in the surface of a polished mastic. There appears to be no way of overcoming this defect, which is an additional reason why this type of underlay should be used only when the poor condition of the base makes its use unavoidable.

FINISH.—The polished finish should be adopted only when it is intended subsequently to maintain the polish, as otherwise the initial polish is quickly lost in normal wear. Like all other highly polished surfaces, it tends to be slippery.

Where a matt finish will suffice the "sanded" finish should be specified. Care should be taken not to work the sand into the surface of the mastic when trowelling. The residue of the sand used for surfacing which is left adhering to the mastic should disappear under normal wear within a short period.

FUMING.—The principal cause of fuming is the overheating of the mastic, but the composition of the mix is also a contributory factor. An ill-balanced mix will fume at a lower temperature than a well-balanced mix.

SHRINKAGE.—It is a characteristic of the material to shrink slightly on cooling. If excessive shrinkage occurs, it is an indication that (a) too hard a mix is being used; or (b) a good mix has been rendered too hard by overheating. Shrinkage away from the walls can be largely overcome by laying the centre bays in a room first. Skirtings should only be specified where these are required as a finish, and not to make good shrinkage cracks which, if the work is properly executed, should be non-existent, or practically so.

HARDNESS.—Consideration has only recently been given to the application to pitch mastic of the hardness numbers at present used for asphalt mastic.

The problem is not easy, especially with regard to the lower ranges, where, owing to the present wide limits allowed for the composition of the mastic, it is possible to have two mastics with the same hardness number, one of which will be satisfactory and the other fail by being too brittle.

Dr. Watkins, of B.R.S., is giving the problem his consideration, and it would appear at present that agreement with the trade will be reached only on the basis that mastics shall not exceed a given hardness number. It is most desirable, however, that agreement should be reached, as in the past some mastics have been found to be excessively soft.

Some have also failed through being too hard, but in these cases the floors generally crack immediately after laying and render their relaying essential.

APPENDIX 2.

HOSPITAL PROGRAMME.

The following is a summary of reports received from 31 contracts for the surfacing with pitch mastic of the floors of hospitals erected by the Ministry.

CONTRACTORS.—Eight contractors well known in the asphalt trade were employed.

AREA LAID.—The total floor area covered was 328,000 square yards.

THICKNESS AND FINISH OF MASTIC.—The thickness specified was ½ in. and the finish "polished." The thickness was later amended to ⅜ in.

CONDITION OF FLOOR SURFACE.—Condition of the concrete floor surfaces to be covered was as follows : (a) Good, 77 per cent. (b) Fair, 10 per cent. (c) Bad, 13 per cent.

TYPE OF UNDERLAY USED.—The specification allowed the use of (a) asphalt powder; (b) building paper or felt.

The contractors were informed that the Ministry preferred the asphalt powder. The two types were used in the following proportions :—

Condition of Concrete.	*Underlay.*
Good.	76% powder. 24% paper.
Fair.	66% powder. 34% paper.
Bad.	50% powder. 50% paper.

THE MECHANICAL MIXER.

LAYING THE MASTIC.

CONTACT WITH FLOOR.—The pitch mastic surfacing was reported to lie in close contact with the concrete base in the following percentage of cases :—

Paper Underlay.	*Powder Underlay.*
Close contact 30%	96%
Rang hollow 70%	4%

HEATING OF MASTIC.—Mechanical mixers were used for reheating the mastic at the site, except in one case, where, owing to the isolated site and the small area to be laid, cauldrons were used.

TEMPERATURE CONTROL AND FUMING.—The specification called for the reheating of the mastic to be carried out at a temperature of not more than 160 deg. C.

In 77 per cent. of the cases the temperature did not exceed 160 deg. C., but in 5 of these slight fuming was reported at 160 deg. C.

In 23 per cent. of the cases the temperature varied between 160 deg. C. and 170 deg. C., and in some cases excessive fuming was reported, especially at the higher temperature.

ADDITION OF COARSE AGGREGATE.—In 66 per cent. of the cases the coarse aggregate was added at the time of manufacture of the mastic.

In 34 per cent. of the cases it was added at the time of reheating at the site, and a bad mix resulted in a few of these cases.

OPERATIVES.—The reports indicate that the following operatives are required to lay one bay of flooring where a "polished" finish is required : Two polishers, two layers, two labourers.

WIDTH OF BAYS.—The average width found to be easy for satisfactory working was 6 ft.

FLOATS.—In the majority of cases the floats used for surfacing were waxed. In cases where non-waxing was commented on, poor results were reported.

GENERAL REMARKS.—Seventy-seven per cent. of the cases were reported as being successful. Twenty-three per cent. of the cases were reported not up to standard in finish, and in a few of these, markings of the floors by beds is occurring.

Following are notes for the guidance of architects extracted from the Ministry of Works' war-time general specification :—

ITEM 9-3. FLOORING.—"Pitch mastic flooring must be used in all cases where this type of flooring is required and not synthetic or natural asphalt mastic."

The unbracketed figures relate to floors of ½ in. thickness. For floors exceeding this thickness substitute bracketed figures. State the thickness of floor and the proposed user as the hardness of the pitch will vary with the use for which the floor is required. The total thickness to which the finished floor is laid shall never be less than ½ in. The following figures are given as a general guide as to suitable thicknesses : Light traffic (in offices and for domestic floors) ½ in. ; medium traffic (light stores, etc.) ¾ in. ; heavy duties (sorting offices, garages, loading docks, etc.) 1 in. and over.

(4) For polished finish the width between screeds should not exceed 6 ft. and for sanded finish 9 ft.

(6) Strike out the clause not required.

(7) Strike out the finish to skirting which is not required.

SPECIFICATION ITEM,

FLOORING.—(See "Notes"). 9-3. "The floors to
shall be surfaced with coal tar pitch mastic conforming to War Emergency B.S. 1093: 43, and Amendment No. 1 July, 1943; the aggregate shall be calcareous in accordance with Clause 6 (a) of the B.S., and the work shall be carried out by one of the following specialist firms : Messrs. Highways Construction, Ltd., Messrs General Asphalte, Ltd., Messrs Neuchatel Asphalte Paving Co., Messrs. Pilkington Asphalt Co., Ltd., Messrs. Faldo Asphalt Co., Ltd., Messrs. Val de Travers Asphalt Paving Co., Messrs. Limmer and Trinidad Lake Asphalt Co., Ltd., Messrs. Ragusa Asphalte Paving Co., Ltd., Messrs. Lawford Asphalte Co., Ltd., Messrs. Rock Asphalte Co., Ltd., Messrs. Excel Asphalte Co., Ltd., Messrs. The Western Trinidad Lake Asphalt Co., Ltd., Messrs. R. J. Goddard and Co., Ltd., Messrs. Bristol Mastic Productions, Ltd., Messrs Asphalt Specialists, Ltd. (Bristol).

Other specialist firms may be added to the above list only with the prior approval of the Commissioners.

The mastic shall contain 15-30 per cent. (30-45 per cent.) of grit in accordance with Part 2 (e) of the B.S. 1/16 in.-¼ in. (¼ in.-½ in.) size, which may be added in the manufacture of the mastic or at site, but in all cases reheating and mixing of the mastic at the site shall be done by mechanical mixers.

The mastic shall be laid and finished as follows :—

(1) A light sprinkling of asphalt powder or a layer of building paper or black sheathing felt shall be used to break the contact with the concrete sub-base, and the contractor is to state in his tender which method he will use. Where paper or felt is used, it shall lay in close contact with the floor over the whole of its surface so that no air pockets are retained between the paper or felt and the concrete.

(2) The temperature of the mastic when taken from the mixer or pots shall not exceed 160 degrees C.

(3) The mastic shall be laid to a thickness of in.

(4) The mastic shall be laid to screeds in widths not exceeding ft. The widths shall be neatly jointed one to the other.

(5) The mastic shall be properly floated to a plain even surface, free from large or small cavities due to incorrect grading or insufficient floating.

(6) The finish shall be obtained by the application of a light coating of sand of a fineness to pass a 25 B.S. mesh immediately before the final trowelling. The sand shall be removed from the finished floor by sweeping or abrasion before the subcontractor leaves the site.

or

The mastic shall have a polished finish obtained by lightly working over the surface of the mastic with hardwood polishing floats until finally set. The polishing floats shall be kept clean and slightly wiped with paraffin wax as necessary.

(7) From skirting in. high of pitch mastic as described to all walls, partitions and upstands abutting the floors finished with pitch mastic. The skirting shall be finished with 1 in. radius cove to floor and shall be slightly rounded on top and shall be sanded/polished finish as specified for floors.

[We understand that the comparative cost of ½ in. pitch mastic flooring and ½ in. asphalt flooring is 6s. 6d. per yard, as against 7s. per yard.—ED.]

Hostels for Boy Miners.

TEN Government hostels, each housing 500 boys called up for mines, are to be built in Yorkshire. Sites have been approved in Doncaster, Mexborough, Rotherham and Castleford, and other hostels will be at Barnsley and Wakefield. These are likely to be standard huts, and it is probable that the design and layout will be prepared by the Ministry of Works for the Mines Department of the Ministry of Fuel and Power.

NATIONAL FEDERATION OF EMPLOYERS

ANNUAL REPORT.

THE annual meeting of the National Federation of Building Trades Employers was held on Wednesday, at the Connaught Rooms, W.C., when the sixty-sixth annual report was presented. The preface of the report pays a well-deserved tribute to the work of the President, Mr. F. Leslie Wallis, J.P., "who has carried out the duties of his office with enthusiastic energy. He has on every available occasion steadfastly defended the interests of building employers and done his utmost to raise their prestige and to enable them with increasing efficiency to discharge their important functions in the public interest. His forthright personality has impressed itself upon all members who have had the opportunity of hearing him at regional meetings throughout the country and by no means least upon your Council, in their long deliberations and discussions under his able chairmanship upon the many matters referred to in this report.

"In recording their appreciation of his valuable services to the Federation during his year of office as President, the Council trusts that Mr. Wallis, who is one of the youngest presidents ever to have been elected to the chair, will continue for many years to play a leading part in the great work which still awaits the Federation."

We take the following extracts from the report :—

The Next Phase.

Now that there are strong hopes of the war (in Europe) being brought to a successful conclusion within a measurable distance of time, greater attention is naturally being given by the Government and by the Federation to the post-war position. Much of the preliminary ground work has been surveyed, and in the next few weeks decisions are likely to be taken in regard to the nature and extent of the post-war programme which will be of fundamental importance to the future of the building industry and of building trades employers.

Meanwhile, Ministers have indicated that so much of the labour force of the industry as is not required for the diminishing amount of the war-time programme and is not suitable for service in the Forces, may shortly be diverted to make a start upon the "Battle for Houses." The nature and extent of this programme has not been disclosed, but it is clear that there will be two problems—the short-term problem of supplying the minimum accommodation in the first two years and the long-term problem of rehousing, for which the target has been stated to be four million houses and upwards over a further period of ten years. The labour force available, after completion of demobilisation and with new trainees, may well become adequate for the long-term programme, and the real difficulty is whether the tempo of demobilisation would allow a sufficient supply of labour to enable fulfilment of the short-term programme.

Prefabrication of Houses.

It has been argued that the building industry will not be able, by the use of "traditional" methods (by which is meant the well-tried methods of proved efficiency) to provide anything like a sufficient number of houses for the short-term needs of the first few years, and that accordingly the production of temporary dwellings by means of prefabrication and pre-assembly processes will be necessary.

It is, of course, difficult for anyone to state categorically whether supplementary measures on these lines would contribute substantially to the solution of the housing problem. It may be that the "short-term" programme will not be quite as formidable as some have anticipated or that the labour shortage may be less acute. In any event, as the memorandum of the Committee of the R.I.B.A. has pointed out, standardisation and prefabrication are not new, and it is as absurd to make a "bogey" of prefabrication as it is to assert that it must have an immediate revolutionary effect upon building technique. The building industry never stands still, and it has constantly absorbed new ideas and new processes. Moreover, it would be a fallacy to assume that post-war buildings will be necessarily of the same types, and of exactly the same materials, as those erected between the wars. Building employers will not hesitate to make use of new processes and methods, after investigating the advantages and disadvantages. If the results justify it, they will adapt their organisations to carry out efficiently the erection of factory-produced sections. Meantime, there is no doubt that the public desire is for real homes and that the main factor in providing those homes will be the rate at which building tradesmen can be released from the Forces or from other occupations.

Trade Union Site Representatives.

In the last annual report reference was made to a scheme for the appointment of Trade Union Site Representatives to assist in dealing with labour matters on important war-time contracts or groups of contracts. For the purposes of war production the scheme had been accepted in principle by the Employers' Federations. At a later stage, however, the Ministry of Works put forward proposals for financing the scheme and these entailed the setting up of a Trust Fund to be administered by trustees appointed by the Minister. This would have given the scheme a permanent or semi-permanent character, and your Council drew attention also to the further considerations: (1) That the Trust Fund arrangements, and the manner of appointment of the Trustees, appeared to deprive the Employers' Federations of any means of control over the appointment or behaviour of trade union site representatives and did not permit of action by the employer bodies to terminate the arrangements; (2) That the fact that Government Funds were being used to pay salaries of trade union officials seemed to be disguised, to some extent, by the Trust Fund arrangement and that the industry would not wish to be subject to public criticism on that account.

Your Council accordingly resolved: "That the proposal for the appointment of a Trust concerning Trade Union Site representatives be opposed and that at the end of hostilities the temporary war-time expedient of the appointment of Site Representatives be terminated."

The decision of your Council having been conveyed to the Ministry of Works, the question was further considered at meetings of the Building Programme Joint Committee and pressure was placed upon your Federation's representatives to acquiesce in various proposals which would have been contrary to the desire expressed by the Council that the scheme should be purely of a temporary nature and definitely restricted to certain important works in the War-time Emergency Programme. Ultimately (in September) the Minister stated that, after considering the views that had been expressed by the employers' and operatives' organisations in regard to the continuance of the scheme and the method of financing it, he felt that it was not possible to proceed with the establishment of the suggested Trust.

Contracts: Provision of Quantities.

Your Contracts Committee have submitted and your Council have approved (subject to decision as to its application to housing work), for adoption by Regional Federations and Local Associations, the following rule of national application:—

"Members shall undertake not to tender in competition for works exceeding £1,500 in total value without quantities being supplied. This undertaking shall not apply to contracts for repairs, painting and decorating."

Your Council, before reaching any decision upon the application to housing work of the above rule for the provision of quantities, has sought the views of Regions. The views of all Regions on this matter have not yet been received by the Contracts Committee.

Registration of Builders.

Your Council have approved a report from their Committee upon a scheme (outlined below) for the registration of builders upon a qualitative basis. The Committee reported that they had examined the different schemes of registration affecting various professions and callings and the prospects of applying the principles underlying those schemes to the conditions existing in the building industry. They were of the opinion that the promotion of a scheme which provided for the *compulsory* registration of builders upon a qualitative basis would, at the present time, be regarded as objectionable on the ground that it was in restraint of trade and that practically it would be impossible precisely to define the undertakings to be included within the description of "builder." They had likewise rejected as impracticable any proposal which would have the effect of restricting to persons registered the carrying out of all or certain specified operations within the building industry.

They recommended, however, as both practicable and desirable, the early promotion of a statutory scheme for the *permissive* registration of builders. The scheme envisaged by the Committee would be similar to that promoted by the Architects to which statutory effect was given in the Architects (Registration) Act, 1931.

Application would need to be made to Parliament for statutory powers to establish a Registration Council whose function would be to keep a Register of Builders. It would be a Register of Undertakings trading as builders (and not of persons) and any undertaking engaged in the building industry would be entitled to apply for registration. Only builders admitted to the Register would be permitted to use the description "Registered Builders," but registration would be voluntary and no one trading as a builder would be under any obligation to become registered if he did not so wish. Admission to the Register would be open to all builders in accordance with the conditions prescribed by the Council.

To operate such a scheme the Registration Council would appoint annually: (a) An Admission Committee; (b) a Discipline Committee; (c) a Board of Building Education.

The proposed Register of Registered Builders would consist of undertakings, whether companies, firms or individuals, trading as builders.

In regard to the qualifications for registration it would be necessary to distinguish between (1) an initial period, of several years after the registration scheme started to operate, when applicants would have to be assessed on existing qualifications; and (2) thereafter, when the provisions for building education may have been greatly increased under the stimulation of the proposed Board of Building Education and when most Registered Builders would have been functioning for the whole or greater part of the initial period.

At this later stage when the scheme was in full operation it would probably become appropriate, in the best interests of the industry, to insist upon more stringent qualifications for admission to the Register than during the initial period.

The standard of qualification of Registered Builders would be determined by the Admission Committee, and applicants for registration should, during the initial period:—

(i) satisfy the Admission Committee that they had been trading as builders for a prescribed period;

(ii) produce evidence of a prescribed number of jobs satisfactorily executed;

(iii) satisfy the Admission Committee as to the technical qualifications of those who directed and controlled the business.

The Committee in their report stressed that the main objective must be the maintenance of a high standard of conduct and performance by registered builders after registration. They suggested that good conduct could be assured because of the existence of the proposed Discipline Committee, and that, in respect of the standard of performance, it could be expected to improve as the result of the operations of the proposed Board of Building Education.

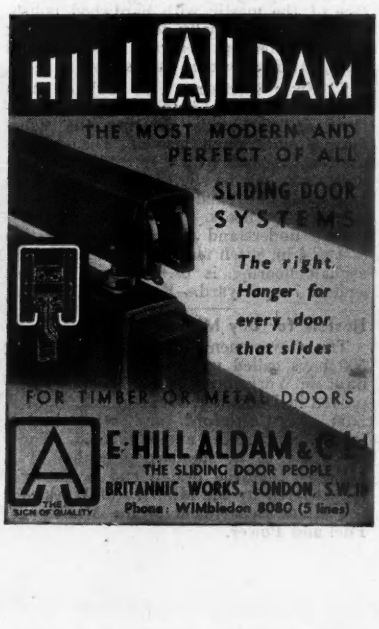
The Committee were of the opinion that the success of such a scheme as they presented to your Council would depend to a very large extent upon the following factors:—

(i) the support of builders in seeking to become registered builders;

(ii) the ability of the Registration Council, through its Admission Committee, to insist upon a high standard of practice from registered builders; and

(iii) the recognition by the public that the description "Registered Builder" was a guarantee of quality and economy.

In approving the scheme of permissive registration outlined above, your Council have authorised the Committee to proceed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with the informal negotiations preparatory to its promotion and to report further in due course.

Federation Premises.

The Federation has acquired from the Howard de Walden Estate a lease for 999 years on Nos. 16, 18 and 20, Mansfield-street. With its present premises at 82, New Cavendish-street, the Federation now owns an island site of some 16,000 sq. ft., the development of which as a centre for the building industry will be among the matters which will be the concern of your Council during the post-war years.

L.M.B.A. ANNUAL MEETING

PRESIDENT RE-ELECTED.

MR. H. C. HARLAND, F.I.O.B., last year's President of the London Master Builders' Association, was unanimously re-elected President for 1944 at the annual meeting of the Association in the Connaught Rooms last week.

Speaking at the meeting before Mr. Harland's election, Lord Portal, Minister of Works, congratulated Mr. Harland on his great work for the building industry in general and the L.M.B.A. in particular during his year of office.

Mr. Harland's re-election was moved by MR. J. S. GALBRAITH, the senior Vice-President, who in normal times would have succeeded to the Presidency this year. He said that with the concurrence of the other officers he had asked Mr. Harland to consider taking on the office of President for a second year. Mr. Harland had done great service to the L.M.B.A. during his year of office, and in view of the difficulties of the times he felt that the Association should have the best man available at its head. During the coming year decisions might be taken which would affect the industry for years ahead. It was essential, therefore, to have an experienced hand at the helm.

Mr. Harland's re-election was carried unanimously by acclamation.

Returning thanks for what he described as a very great honour, MR. HARLAND said that without the consent and co-operation of his colleague, Mr. J. W. Laing, he could not have undertaken the Presidency for a second year. The Association owed a debt of gratitude to Mr. Laing, who had agreed to shoulder the extra burden of work which would inevitably be thrown on his shoulders for another year. What he (the speaker) had done for the Association and for the building industry he had done gladly. He would try to serve it as faithfully in the year to come.

The other officers were then re-elected as follows: Senior Vice-President, J. S. Galbraith (Galbraith Bros., Ltd.); Junior Vice-President, E. W. Garrett (J. Garrett & Son, Ltd.); Hon. Treasurer, P. Smallwood (Frederick Smith & Co., Ltd.).

The following members of the Association were then elected by ballot to the Council: A. J. Chapman (C. H. Gibson, Ltd.), H. J. Falkus (Falkus Bros., Ltd.), E. S. Moss (E. S. Moss, Ltd.), A. H. Nash (Hall, Beddall & Co., Ltd.), H. S. Thornton (Ashby & Horner, Ltd.), W. S. Try (W. S. Try, Ltd.), F. L. Whitehead (L. & W. Whitehead, Ltd.).

Mr. F. W. King (Wm. King & Sons, Ltd.) was elected Honorary Auditor.

Before the annual meeting, Mr. Harland presided at a luncheon of the Council, at which Lord Portal was the guest of honour. Among the other guests were Mr. George Hicks, M.P., Parliamentary Secretary, Ministry of Works; Sir Hugh Beaver, Director-General of Works and Buildings, M.O.W.; and Mr. Leslie Wallis, President of the National Federation of Building Trades Employers.

LORD PORTAL'S ADDRESS.

In his address at the annual meeting, LORD PORTAL said that the building industry had done an enormous job during the war. It had met all the Government programmes with many types of buildings with which they were not familiar. Though many of their men, including many of their key men, had been removed, the return they had given this country was very satisfactory. The amount of building labour still required for building was very, very great. We must plan for the time when the war effort began to slacken.

At the present time [said Lord Portal] our Ministry is working very closely with the Ministry of Health and the Secretary of State for Scotland. We have now got Lord Woolton as Minister of Reconstruction, and it is obvious that his help will be a great advantage in revising and co-ordinating the plans put forward by the various Ministries on the Home Front.

If you look at the question of controls to-day they are needed when commodities are in short supply. If a commodity is not in short supply I do not see why a control is needed. Directly you get out of difficulties I imagine, after the war, certain things can be taken off entirely, and others will have to be continued for a time. We are responsible for materials, and you are lucky in the building trade in that all the materials you want are ready at hand. I hope that bricks will remain popular. Brickworks have been closed down, but they have been maintained so that they can be opened up as quickly as possible. The cement industry has been kept going, and there should be no difficulty with it. We are keeping a special eye on the question of timber.

These things are being watched, but we do not know how they will be required. In our Ministry we have got people who have been studying the standardisation of fittings. You must give as good a house as you possibly can, but you must be alive to the question of cost. It is not true to say that standardisation means a less efficient article. With two or three types that are of the best you get cheapness of manufacture.

Wages have gone up in your industry practically 30 per cent., and they will have to remain up to the standard they are now. We have to look to every new method we can to cut cost of fittings so that you will be able to build a great number of houses in this country.

A question with which we are concerned is the programme for post-war, and that programme is in an advanced position. It is to meet a transitional period of two years and an additional settling period of ten years. The difficult period is the transitional one. The problem in all this is what you might call timing.

One thing we must get out of the way are the war-damaged houses. Those are things we do not want to be going on with when the war is over. We want to be ready to start building when the war is over, or before it is over, if that is possible, and that is something we are very much alive to.

The important question after the war will be the question of priorities during the interregnum period. Housing must be one of the first priorities. There are many people who have been married or who want to be married, and you want to give them houses when they come back. The feeling of the fighting men in this war is the same as in the last war. All they are interested in is coming home, and you must have the best homes for them to come home to.

On the question of working hours it is our purpose to get men working normal hours as soon as possible. The only thing we can do about that is to put a ceiling on the number of hours the men work.

In conclusion, Lord Portal referred to Mr. Leslie Wallis, and said that the Government owed him a debt of gratitude for his great work during his year of office. As Vice-Chairman of the Advisory Council at the Ministry of Works he had done valuable service.

MR. W. E. RICE, O.B.E., J.P., Past-President of the L.M.B.A., thanked Lord Portal on behalf of the Association for his address.

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PREHEATING OF METALS

USE OF TEMPILSTIKS.

THE accurate preheating of high tensile steels, non-ferrous metals and cast-iron has been established as being essential to the production of sound welded constructions (states the Ministry of Supply). The difficulty in the past has been in obtaining a suitable method of reading preheat temperatures under workshop conditions. Tempilstiks have been found to be both accurate (± 1 per cent.) and easy to use; they are now readily available for the following temperatures: 125, 150, 175, 200, 225, 250, 275, 300, 350, 400, 450, 500, 550, 600, 650 and 700 degrees Fahrenheit.

Tempilstiks are chemical mixtures (rather like a crayon) with fixed melting-points, and may be used in two ways.

1. A mark about ½ in. long is made on the job to be welded in much the same way as a chalk mark would be made. Heat is then applied, and when the mark melts and virtually disappears, the temperature stated on the particular Tempilstik being used has been reached. This method should only be used when the preheating flame does not play directly on the locality where the mark has been made.

2. Where the entire surface of the work may come into contact with the preheating flame, the temperature is ascertained by periodically removing the flame and marking the job as before. The correct temperature has been reached when the mark melts as soon as it is made.

The preheating chart shows ranges of preheat temperatures recommended for different metals and can be had on application to Director for Sundry Materials, Ministry of Supply, 8-10, Old Jewry, London, E.C.2.

"REORGANISATION OF THE INDUSTRY"

A SOUTHERN COUNTIES' FEDERATION REPORT.

REFERENCE to a report on the Reorganisation of the Building Industry—prepared by a Special Commission of the Southern Counties' Federation of Building Trades Employers—was made at the annual luncheon of the Southern Counties' Federation, held under the chairmanship of Mr. G O. Swayne, M.I.O.B., on January 20, at the Connaught Rooms. The guest of honour was Mr. Leslie Wallis, the National President.

MR. NORMAN LONGLEY, who proposed the toast of the "Special Commission," said the Commission had prepared an interim report and a final one. The interim dealt with the reorganisation of the area covered by the Southern Counties Federation, and though some might be disappointed that its recommendations had not yet been put into being, yet it had made its mark and was already having its effect, though not always consciously. The final report on national organisation was now being considered. The terms of reference, put in a nutshell, were "to put on record the present state of the industry and report to the Council to enable the latter to formulate a policy to achieve a higher degree of efficiency and economy in the industry, having proper regard to the interests of the community." The keynote of the report would be found in the reference to the community, for it would be found that in serving the community they would be serving the best interests of the industry. The Commission had put in an enormous amount of work into the report, and though it could not be expected that every part would go unchallenged—controversial matters were bound to create differences, and without controversial matters there would have been no need for a report—he felt the best form appreciation of the Commission's work could take would be the acceptance of the whole of the recommendations.

LIEUT.-COL. H. J. COX (Chairman, Special Commission) said that the Council's report had referred to their work as Herculean. He had reminded them that Hercules had been set twelve tasks, one of which was to clean the Augean stables in which 3,000 oxen had been stabled 30 years! While he did not wish to anticipate the publication of the Report, he would refer to one feature—the recommendation that, in the interests of the building public, the builder should have a definite status. "In too many cases," said the speaker, "the builder is a mere channel through which money flows to sub-contractors over whom he has no real control. It would be to the benefit of the public and also of the architect if more use were made of the builder's knowledge and technical skill. But if he is to justify this then he must be qualified." Steps should be taken to remove from the industry people who were not qualified—not only employers but staff. It was encouraging to read that active steps were in being to establish a Chair of Building at Cambridge University. That was a first step to enable builders to obtain a wider culture than many had had the good fortune to acquire. The sum required for that Chair was £250,000—not beyond the bounds of the industry.

In proposing the toast of the "National Federation," the PRESIDENT reminded the company that they should always remember it was their Federation, not, as some people seemed to think, a nebulous and detached organisation managed and run by a few self-seeking members of large contracting firms and bureaucratic officials all out of touch with the small and medium-sized builders. One of the most frequent complaints was that it was slow to act. The same criticism had often been levelled at our Parliamentary system of Government. Since he had been a member of the National Council he had discovered it accomplished a very great and important work, particularly during the war. Details of that work would be found in the Annual Report, which was a complete vindication of the National Federation, if such were needed. They in the Southern Counties felt justly proud that by nominating Mr. Wallis for the National Presidency they had given the industry a leader of exceptionally high ability. He had upheld the dignity and prestige of the National Federation during his year of office.

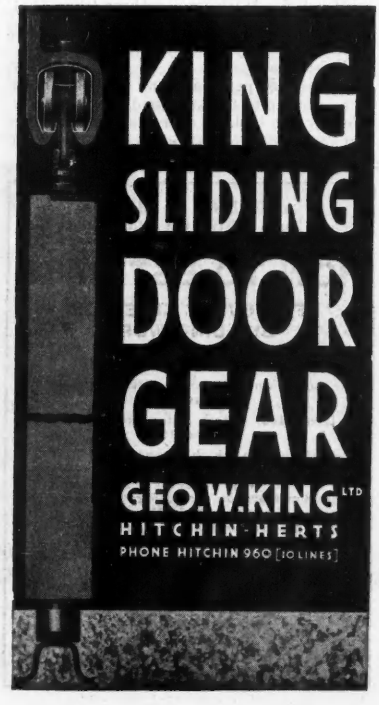
The "Guaranteed Week" Problem.

MR. WALLIS, responding, said that the National Federation had great regard for the work that Mr. Norman Longley had done on their Reorganisation Committee. People had expressed the feeling that National Reorganisation meant the abandoning of their rights. No one had anything to fear but much to hope for. As far as the Federation was concerned, the Regions' best policy was to send the right people and then trust them. He had (said Mr. Wallis) spent part of the morning at the National Joint Council, where among other things they had discussed the guaranteed week. The matter had been referred to an *ad hoc* committee, and it was hoped they would report by March. He could not say what trend discussion had taken, but he could say the Civil Engineering Federation had already arrived at a decision, and it might be the building industry would follow suit. Another point of interest was that the Minister of Works had asked advice as to what controls should remain after the war. (Cries of "None.") He knew he would get that reply, said Mr. Wallis, but he would ask them to consider what a state of chaos in regard to materials and labour there would be if all controls were immediately removed. "The one that has to go," he declared, "is that concerned with the direction of labour; I believe that Lambeth Bridge House is with us there, and that will be a first step towards a better industry."

Another important matter was demobilisation. Mr. Bevin had announced his policy of "First in, first out." Builders would have to look at the matter squarely. But Mr. Bevin had also said that the building industry was his real hope. How it was to be done he (Mr. Wallis) did not mind, but if that hope was to be fulfilled real help to release essential men was needed.

In conclusion, he (Mr. Wallis) had been accused of rushing things. That he would deny; it was not possible to rush the National Federation. As an example, it had been decided last summer to appoint a new Director. Progress had been made, but very slowly; he hoped, however, that on February 16 a suggestion would be put before the Council.

Responding to the toast of "The Guests." wittily proposed by MR. S. J. KINGERLEE, MR. R BLACKMORE (President, S.W. Federation) said how much he appreciated the action of the Southern Counties Federation in inviting other Regional Presidents not only to the lunch but to the annual meeting; that example might well be copied. As to the national body, one of the most outstanding things it had done was to appoint a Policy Board; they hoped to see great things from that body. Mr. Blackmore concluded by paying a tribute to Mr. Wallis, "one of the most outstanding Presidents the Federation has had; he has a firm grip on the industry, both inside and out. A hustler," added Mr. Blackmore, "he is both patient and forebearing, and I should like to express our thanks to him for his work, both regionally and nationally."



TECHNICAL MAGAZINES FOR THE R.A.F.

READERS may recall that a note appeared in *The Builder* some time ago asking for unwanted recent copies for the use of men serving in the Royal Air Force, at home. In connection with this scheme we understand that lectures and discussions are arranged on the fundamental aspects of building, particular attention being paid to post-war problems of construction. This supplements and amplifies the training which is given in an official capacity. The magazines are circulated as an adjunct to the lectures and discussions and, from all accounts, prove very popular.

The number of men benefiting from the scheme runs into many thousands, so it will be seen that the demand is well-nigh insatiable. Any gifts, therefore, of up-to-date technical magazines, including American periodicals dealing with the trades connected with the building industry, civil engineering, etc., would be very acceptable.

The Royal Institute of British Architects, which has been instrumental in collecting these periodicals, will be pleased to forward them on if they are sent to Miss Bromley, c/o R.I.B.A., 66, Portland-place, W.1, or they may be sent direct to Squadron-Leader C. J. Eprile, 3, Crescent-terrace, Cheltenham.

Workmen's War Savings.

The staff and workmen of Messrs. John Laing and Son, Ltd., have just passed another milestone in their National Savings Drive, having collected £250,000 in the period from June 1, 1940, to January 7, 1944. The building and civil engineering contracting industry is severely handicapped with regard to National Savings, as men are moved about so much from one contract to another, and moreover there is a considerable difference between earnings at various times of the year. The firm feel proud of their men having saved such a large amount, particularly in view of the especial difficulties of the industry.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 2nd APRIL, 1943

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors]

	Crafts-men.	Lab-ourers.
Aberavon	2/0	1/7
Aberdare	2/0	1/7
Abergavenny	2/0	1/7
Abingdon	1/10½	1/5½
Accrington	2/0	1/7
Aldeburgh	1/8½	1/4½
Aldershot	1/10½	1/5½
Alfreton U.D.	2/0	1/7
Alnwick	1/11½	1/6½
Altrincham	2/0	1/7
Amble	1/11½	1/6½
Amersham	1/10½	1/5½
Ammanford	2/0	1/7
Andover	1/10	1/5½
Ardingly	1/10	1/5½
Arundel	1/10	1/5½
Ascot	1/10	1/5½
Ashby-de-la-Zouch U.D.	2/0	1/7
Ashford (Kent)	1/10	1/5½
Ashford (Middlesex)	2/0	1/7
Ashington	1/11½	1/6½
Ashtead	2/0	1/7
Ashton-under-Lyne	2/0	1/7
Aylesbury	1/10	1/5½
Aylsham	1/9	1/4½
Bagshot	1/10	1/5½
Banbury	1/10	1/5½
Barnsley	2/0	1/7
Barnstaple	1/10	1/5½
Barrow-in-Furness	2/0	1/7
Barry	1/10	1/5½
Basingstoke	1/11½	1/6½
Bath	2/0	1/7
Batley	1/10½	1/5½
Beaconsfield	1/8½	1/4½
Beccles	1/11½	1/6½
Bedford	1/10	1/5½
Berkhamsted	1/11½	1/6½
Berwick	2/0	1/7
Beverley	1/10½	1/5½
Bexhill	1/10	1/5½
Bideford	1/10	1/5½
Biggleswade	1/9½	1/5
Billericay	1/10	1/5½
Birchington	‡£2/1	¶
*Birkenhead	†2/0	††7/7
Birmingham C.B.	2/0	1/7
Bishop Auckland	1/11	1/6½
Bishop's Stortford	2/0	1/7
Blackburn	2/0	1/7
Blackpool	2/0	1/7
Blyth	1/10	1/5½
Bognor Regis	2/0	1/7
Bolton	1/11	1/6½
Bournemouth	1/10	1/5½
Bracknell	2/0	1/7
Bradford	1/9	1/4½
Bradford-on-Avon	1/10	1/5½
Braintree	1/11½	1/6½
Brentwood	1/10½	1/5½
Bridgwater	1/11½	1/6½
Bridlington	2/0	1/7
Brighouse	1/11	1/6½
Brighton	2/0	1/7
Bristol	1/10	1/5½
Broadstairs	1/11½	1/6½
Bromsgrove U.D.	2/0	1/7
Buckley	1/8	1/4
Bungay	1/8½	1/4½
Burnham-on-Crouch	2/0	1/7
Burnley	2/0	1/7
Burslem	2/0	1/7
Burton-on-Trent C.B.	2/0	1/7
Bury	1/9½	1/5
Bury St. Edmunds	1/11½	1/6½
Buxton	1/10½	1/5½
Byfleet	2/0	1/7
Cambridge	1/10	1/5½
Canterbury	2/0	1/7
Cardiff	1/10	1/5½
Carlisle	2/0	1/7
Carnforth	2/0	1/7
Castleford	2/0	1/7
Caterham	1/9	1/4½
Chard	1/11	1/6½
Chatham	1/11½	1/6½
Chelmsford	1/11½	1/6½
Cheltenham	1/11	1/6½
Chepstow	1/11½	1/6½
Chertsey	1/11	1/6½
Chester	2/0	1/7
Chesterfield M.B.	2/0	1/7
Chichester	1/10	1/5½
Chorley	2/0	1/7
Cirencester	1/9½	1/5
Clacton	1/10	1/5½
Cleveleys	2/0	1/7
Clitheroe	2/0	1/7
Cobham (Surrey)	1/11	1/6½
Colchester	1/11½	1/6½
Colwyn Bay	1/11	1/6½
Congleton	1/11½	1/6½
Coventry C.B.	2/0	1/7
Cranbrook	1/10	1/5½
Cranleigh	1/10	1/5½
Crawley	1/10	1/5½
Crewe	1/11½	1/6½
Cromer	1/9	1/4½
Crowborough	1/10	1/5½
Cuckfield	1/10	1/5½
Darlington	2/0	1/7
Darwen	2/0	1/7
Daventry M.B.	1/10½	1/5½
Deal	1/10	1/5½
Denbigh Town	1/11	1/6½
Derby C.B.	2/0	1/7
Devizes	1/9	1/4½
Dewsbury	2/0	1/7
Didcot	1/10	1/5½
Diss	1/8½	1/4½
Doncaster	2/0	1/7
Dorchester	1/9½	1/5
Dorking	1/10½	1/5½
Dover	1/10	1/5½
Dovercourt	1/10	1/5½
Driffield	1/10½	1/5½
Droitwich M.B.	1/11½	1/6½
Dudley M.B.	2/0	1/7
Dunstable	1/10½	1/5½
Durham City	2/0	1/7
Eastbourne	1/11	1/6½
E. Glam. (Mon. Val.)	2/0	1/7
East Grinstead	1/10	1/5½
Edenbridge	1/10	1/5½
Ely	1/9	1/4½
Epping	2/0	1/7
Exeter	1/11½	1/6½
Exmouth	1/10½	1/5½
Fakenham	1/9	1/4½
Falmouth	1/10½	1/5½
Fareham	1/11	1/6½
Faversham	1/10	1/5½
Felixstowe	1/11	1/6½
Filey	1/10½	1/5½
Fleetwood	2/0	1/7
Flint	2/0	1/7
Folkestone	1/10	1/5½
Frinton-on-Sea	1/10	1/5½
Frome	1/9	1/4½
Gainsborough U.D.	1/11	1/6½
Gateshead	2/0	1/7
Gillingham (Kent)	1/11	1/6½
Glossop	2/0	1/7
Gloucester	1/11½	1/6½
Godalming	1/10	1/5½
Goole	2/0	1/7
Gosport	1/11½	1/6½
Grantham M.B.	1/11	1/6½
Gravesend	1/11½	1/6½
Great Yarmouth	1/10	1/5½
Grimsby	2/0	1/7
Guildford	1/10	1/5½
Guilsborough	1/10½	1/5½
Halifax	2/0	1/7
Hanley	2/0	1/7
Harpenden	1/11	1/6½
Harrogate	2/0	1/7
Hartlepools	2/0	1/7
Harwich	1/10	1/5½
Haslemere	1/10	1/5½
Hastings	1/10	1/5½
Hatfield	1/11½	1/6½
Haywards Heath	1/10	1/5½
Hednesford	1/11½	1/6½
Hemel Hempstead	1/11	1/6½
Henley-on-Thames	1/10	1/5½
Hereford	1/10	1/5½
Herne Bay	1/10	1/5½
Hertford	1/11½	1/6½
Heysham	2/0	1/7
Hitchin	1/11	1/6½
Hoddesdon	1/11½	1/6½
Holt (Norfolk)	1/8½	1/4½
Horley	1/10	1/5½
Horsham	1/10	1/5½
Horwich	2/0	1/7
Huddersfield	2/0	1/7
Hull	2/0	1/7
Hunstanton	1/9	1/4½
Huntingdon	1/9½	1/5
Ilfracombe	1/10	1/5½
Ingatestone	1/10½	1/5½
Ipswich	1/11½	1/6½
Isle of Thanet	1/10	1/5½
Isle of Wight	1/9½	1/5
Keighley	2/0	1/7
Kenilworth	2/0	1/7
Kettering M.B.	2/0	1/7
Kidderminster M.B.	1/11½	1/6½
King's Lynn	1/10	1/5½
Kirkham	2/0	1/7
Knowle	1/11½	1/6½
Lancaster	2/0	1/7
Leamington M.B.	2/0	1/7
Leatherhead	1/11	1/6½
Leeds	2/0	1/7
Leicester C.B.	2/0	1/7
Leighton Buzzard	1/9	1/4½
Letchworth	1/11	1/6½
Lewes	1/10	1/5½
Lichfield M.B.	1/11	1/6½
Lincoln C.B.	2/0	1/7
Littlehampton	1/10	1/5½
*Liverpool	‡£2/1	¶
Llandudno	1/11	1/6½
Llanelly	2/0	1/7
London—		
12m. radius	2/1½	1/8
12-15m. radius	2/1	1/7½
Long Eaton U.D.	2/0	1/7
Longton	2/0	1/7
Loughborough M.B.	2/0	1/7
Louth M.B.	1/10½	1/5½
Lowestoft	1/10	1/5½
Luton	1/11½	1/6½
Macclesfield	1/11½	1/6½
Maidenhead	1/11	1/6½
Maidstone	1/10½	1/5½
Malvern U.D.	1/10½	1/5½
Manchester	2/0	1/7
Manningtree	1/9	1/4½
Mansfield M.B.	2/0	1/7
March	1/9	1/4½
Margate	1/10	1/5½
Market Harborough	1/11	1/6½
Matlock U.D.	1/10½	1/5½
Melton Constable	1/8½	1/4½
Melton Mowbray	1/11	1/6½
Merthyr	2/0	1/7
Middlesbrough	2/0	1/7
Middleton	2/0	1/7
Middlewich	1/11½	1/6½
Milford Haven	1/10½	1/5½
Morecambe	2/0	1/7
Morley	2/0	1/7
Mundesley	1/9	1/4½
Nantwich	1/11½	1/6½
Nelson	2/0	1/7
Newark-on-Trent	1/11½	1/6½
Newbury	1/10	1/5½
Newcastle-on-Tyne	2/0	1/7
Newcastle-u.-Lyme	2/0	1/7
New Forest	1/10	1/5½
Newmarket	1/10	1/5½
Newport, Mon.	2/0	1/7
Newport Pagnell	1/10	1/5½
Northampton C.B.	2/0	1/7
Norwich	2/0	1/7
Nottingham	2/0	1/7
Nuneaton	2/0	1/7
Oakham U.D.	1/10½	1/5½
Oldham	2/0	1/7
Ormskirk	2/0	1/7
Oxford	1/11½	1/6½
Oxted	1/10½	1/5½
Paignton	1/11½	1/6½
Peterborough (Borough)	1/11½	1/6½
Plymouth	2/0	1/7
Pontefract	2/0	1/7
Pontypridd	2/0	1/7
Port Talbot	2/0	1/7
Portsmouth	1/11½	1/6½
Preston	2/0	1/7
Pulborough	1/10	1/5½
Ramsgate	1/10	1/5½
Reading	1/11½	1/6½
Redditch U.D.	1/11½	1/6½
Redhill	1/10½	1/5½
Ripon	1/10½	1/5½
Rochdale	2/0	1/7
Rochester	1/11	1/6½
Rugby M.B.	2/0	1/7
St. Albans	1/11½	1/6½
St. Helens	2/0	1/7
St. Neots	1/9½	1/5
Saffron Walden	1/9	1/4½
Salisbury City	1/9½	1/5
Salisbury Plain	1/11	1/6½
Sawbridgeworth	1/10½	1/5½
Saxmundham	1/8½	1/4½
Scarborough	1/11½	1/6½
Scunthorpe	2/0	1/7
Selby	2/0	1/7
Sevenoaks	1/10½	1/5½
Sheerness	1/10	1/5½
Sheffield	2/0	1/7
Shipley	2/0	1/7
Shoeburyness	1/11½	1/6½
Shoreham	1/11	1/6½
Shrewsbury M.B.	1/11½	1/6½
Sittingbourne	1/10	1/5½
Skegness U.D.	1/11	1/6½
Sleaford U.D.	1/10½	1/5½
Slough	1/11	1/6½
Smethwick	†2/0	††7/7
Southampton	1/11½	1/6½
Southend-on-Sea	1/11½	1/6½
Southport	2/0	1/7
South Shields	2/0	1/7
Spalding	1/10	1/5½
Stafford M.B.	1/11½	1/6½
Staines	1/11	1/6½
Stamford M.B.	1/11	1/6½
Stevenage	1/11	1/6½
Stockport	2/0	1/7
Stockton-on-Tees	2/0	1/7
Stoke-on-Trent C.B.	2/0	1/7
Stourbridge M.B.	2/0	1/7
Stourport U.D.	1/11½	1/6½
Stowmarket	1/9	1/4½
Stratford-on-Avon M.B.	1/11	1/6½
Stroud	1/11	1/6½
Sunderland	2/0	1/7
Sutton Coldfield M.B.	2/0	1/7
Swaffham	1/8½	1/4½
Swanage	1/10	1/5½
Swansea	2/0	1/7
Swindon	1/10½	1/5½
Tamworth M.B.	1/11½	1/6½
Taunton	1/10½	1/5½
Tenterden	1/10	1/5½
Thames Haven	2/0	1/7
Thetford	1/9½	1/5
Thorpe Bay	1/11½	1/6½
Todmorden	2/0	1/7
Tonbridge	1/10½	1/5½
Torquay	1/11½	1/6½
Totnes	1/10	1/5½
Trowbridge	1/9	1/4½
Truro	1/9½	1/5
Tunbridge Wells	1/10½	1/5½
Uppingham (Salop)	1/11½	1/6½
Uttoxeter U.D.	1/10½	1/5½
Wakefield	2/0	1/7
Walsall C.B.	2/0	1/7
Walsden	2/0	1/7
Walton-on-Naze	1/10	1/5½
Ware	1/11½	1/6½
Warminster	1/9	1/4½
Warrington	2/0	1/7
Warwick M.B.	2/0	1/7
Wellington R.D.	1/11½	1/6½
Welwyn	1/11	1/6½
Welwyn Gar. City	2/0	1/7
Wells (Norfolk)	1/8½	1/4½
West Bromwich C.B.	2/0	1/7
Westcliff-on-Sea	1/11½	1/6½
Weston-super-Mare	1/11	1/6½
Weybridge	1/11	1/6½
Weymouth	1/10	1/5½
Whitby	1/11	1/6½
Whitstable	1/10	1/5½
Widnes	2/0	1/7
Wigan	2/0	1/7
Wigton	1/10½	1/5½
Willington	2/0	1/7
Wilmslow	2/0	1/7
Winchester	1/10½	1/5½
Windermere	1/10½	1/5½
Windsor	1/11	1/6½
Wisbech	1/9½	1/5
Witham	1/10	1/5½
Woking	1/10½	1/5½
Wokingham	1/10	1/5½
Wolverhampton C.B.	2/0	1/7
Woodbridge	1/9½	1/5
Worcester C.B.	1/11½	1/6½
Workington	1/10½	1/5½
Worksop	1/11½	1/6½
Worthing	1/10	1/5½
Wrexham	1/11½	1/6½
Wroxham	1/9½	1/5
Wycombe	1/11	1/6½
Wymondham	1/9	1/4½
Yeovil	1/10½	1/5½
York	2/0	1/7

* An application for an increase of rates is under discussion.

† Plus 2d. per working day. ‡ Plasterers 2/1½. ¶ Tradesmen's Labourers, 1/7½. Navvies and General Labourers, 1/6½.

§ Joiners, Plumbers, Bricklayers, Tilers and Masons receive 2/- per week or 4d. per day Tool Money.

NOTE.—Carpenters, Joiners and Plumbers in all Towns and Districts (other than Birkenhead and Liverpool) receive 2d. per day Tool Allowance.

For Building Trade Wages in Scotland, see page 87.

PRICES CURRENT OF MATERIALS*

NOTE.—These prices apply to large quantities of materials at works at London stations, or site, in London area as stated. Prices for smaller quantities ex merchant's warehouse will of course be higher. Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry. The prices of soft woods are for cash on delivery.

BRICKS, &c.

	£ s. d.
First Hard Stocks	4 13 0
Second Hard Stocks	4 6 0
Mild Stocks	3 13 0
Single Rough Stocks	3 7 0
Common Stocks	2 17 6

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job. *In addition*, there will be the Levy under the Bricks (Charges) Order, 1942, of 3s. per 1,000.

2½ in. Phorpres. A discount of 6d. 1,000 only monthly account.	King's Cross Station per 1,000 s. d.	To sites in W.C. District per 1,000 s. d.
Pressed	56 9	63 3
Keyed	58 9	65 3
Single Bullnose	76 9	83 3
Rustics	76 9	83 3
Whites	77 3	83 3

White Midhurst Best selected (delivered London site)	£ s. d. 5 10 0
Best blue Pressed Staffs. (London Stns.)	11 12 0
Do. Bullnose (London Stns.)	12 2 0
Blue Wire Cuts (London Stns.)	10 9 6

Best Stourbridge Fire Brick (London Stns.) :—

£ s. d.	£ s. d.
2½ in. 10 0 0	3 in. 12 0 0

GLAZED BRICKS (London Stns.). Add 12½% to Prices.

Best White Ivory and Salt Glazed Stretcher	30 0 0
D'ble Str'tch'rs	38 10 0
D'ble Headers	35 10 0
One side&two ends	39 10 0
Headers	29 10 0
Two sides&one end	40 10 0
Quoins, Bullnose and 4½in.Flats	36 10 0
Splays and Squints	38 0 0

Second Quality, £2 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

ADD LEVY ON BRICKS, 3/– per 1,000 except Glazed Bricks.

PARTITION SLABS.

Delivered on site London Area.

"PHORPRES" HOLLOW PARTITION BLOCKS.

	s. d.		s. d.
2" per yd. sup.	2 8	3" per yd. sup.	3 6
2½" " "	2 11	4" " "	3 10

CLINKER CONCRETE.

2" per yd. sup.	1 11	3" per yd. sup.	2 6
2½" " "	2 3	4" " "	3 6

CRANHAM TERRA COTTA.

	s. d.
Size 12 x 9 x 2" per yd. super	2 8
Size 12 x 9 x 2½" "	2 11
Size 12 x 9 x 3" "	3 6
Size 12 x 9 x 4" "	3 10

HEMPSTEAD—KEYED TWO SIDES.

12" x 9" x 2"	2 8	12" x 9" x 3"	3 6
12" x 9" x 2½"	2 11	12" x 9" x 4"	3 10

Per yard super d/d. Free on site, London.

Plus 2d. for smooth one side, and 4d. for smooth both sides.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington,G.W.R., or South Lambeth, G.W.R., per ft. cube	3 3½
BEER STONE—RANDOM BLOCK— Free on rail at Seaton Station per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. "	3 1½
Selected approximate size one way, 1d. per cubic ft. extra, selected approximately three sizes or for special work, 3d. per cubic ft. extra.	
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R. per ft. cube	4 7
Do. do. delivered on road waggons as above stations per ft. cub.	4 7
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. *average* and ¼d. beyond 30 ft.	
HOPTON-WOOD STONE— F.O.R. Quarries, Wirksworth, Derbyshire, Random blocks from 10ft. and over P.ft.cb.	s. d. 13 2
Sawn two sides	26 11
Sawn three or four sides	31 11
YORK STONE, BLUE—*Robin Hood Quality*. Delivered at any Goods Station, London. 6 in. sawn two sides landings to sizes (under 30 ft. super) per ft. super	5 6
6 in. rubbed two sides, ditto "	6 3
3 in. sawn two sides slabs (random sizes) "	2 7
2 in. to 2½ in. sawn one side slabs (random sizes) (paving) "	1 8½
1½ in. to 2 in. ditto "	1 4½
HARD YORK— Delivered at any Goods Station, London. Scrappled random blocks .. per ft. cube	6 10
6 in. sawn two sides landings to sizes (under 40 ft. super) per ft. super	5 7½
6 in. rubbed two sides, ditto "	6 9
4 in. sawn two sides slabs (random sizes) "	3 5
3 in. ditto ditto "	2 8
2 in. self-faced random flags.. per yd. super	8 9

CAST STONE.

Delivered in London area in full van loads, per ft. cube : Plain, 7s. 6d. Moulded, 8s. 6d. Small section cills and copings, 11s.

SAND.

Thames Ballast	11s. 6d. per yd.	delivered 2 miles radius Paddington.
Pit Ballast	10s. 0d. " "	
Pit Sand	12s. 0d. " "	
Washed Sand	13s. 0d. " "	
¼ in. Shingle	10s. 6d. " "	
¼ in. Broken Brick	16s. 0d. " "	
Pan Breeze	10s. 0d. " "	

CEMENT.

Best British Portland Cement. Standard Specification, delivered London area.	£ s. d.
6 ton loads and upwards site .... per ton	2 11 0
1 to 6 tons site	2 14 0
Alongside Vauxhall in 80-ton lots	2 8 6
" Ferrocrete " Rapid Hardening Cement— 6 ton loads and upwards site	2 17 0
1 to 6 tons site	3 0 0
Alongside Vauxhall in 80-ton lots	2 14 6
" Aquacrete " Water Repellent, " Blue Circle" cement, 30s. per ton on ordinary " Blue Circle " prices.	
" Colorcrete " Nos.1 and 2. Coloured rapid Hardening Portland Cement in 6 ton lots	4 11 0
" Colorcrete " not rapid hardening, according to colour, from £7 to £15 10s. per ton.	
" Snowcrete " White Portland Cement (in free paper bags)	11 5 0
Under one ton .. .. per cwt.	0 13 2
" 417 " Cement (Ultra Rapid Hardening) Delivered Site London Area in 6 tons lots and upwards	3 11 0
Plus packages at current prices.	
Super Cement (Waterproof), bags extra.	4 1 0

NOTE.—Jute sacks charged at 35s. 6d. nett per ton (20 sacks) for quantities of or exceeding one ton. Less than one ton 1s. 9½d. nett each. Credit 1s. 6d. nett each when returned in good condition within two weeks.

£ s. d.	£ s. d.
Roman Cement 8 10 0	Keene'sCement,White 7 0 0
Parian Cement 7 0 0	" " Pink 6 10 0

Cementone Colours for cement according to tints, per cwt. from £3 5s. 0d.

SLATES.

First quality slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station.

Per 1,000 actual	£ s. d.		£ s. d.
24 by 12	45 5 0	18 by 10	24 0 0
22 by 12	37 17 6	18 by 9	22 12 6
22 by 11	34 2 6	16 by 10	21 10 0
20 by 12	33 0 0	16 by 8	16 12 6
20 by 10	30 5 0		

Having Secured the Contract— what about the Steel Scaffolding?

TUBULAR

SCAFFOLDING

For the lowest Prices apply to the Oldest Firm in the Scaffolding Trade.

STEPHENS & CARTER LTD.

The British Steel Scaffolding Co.

731-761, HARROW RD., N.W.10

Telephone No. Ladbroke 1191 (6 lines)

PLASTER.

	£ s. d.		£ s. d.
Coarse, Pink	4 2 6	Sirapite, Coarse	4 8 6
" White	4 10 0	" Finish	4 14 6
Pioneer	5 5 0		

Above prices for 4-ton loads and over London Area.

Best Ground Blue		Grey Stone Lime	3 1 0
Lias Lime	3 7 6	Chalk Lime	3 1 0
Granite Chippings	1 15 0	Hair per cwt.	3 15 0

NOTE.—Sacks are charged 1s. 9d. each, and credited 1s. 6d. if returned in good condition within three months, carriage paid.

Stourbridge Fireclay in paper bags, £2 12s. 6d. 6-ton lots at railway depot.

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons ..... Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	£5 18 0
Ditto hand-made ditto	7 2 0
Ornamental ditto	7 8 6
Hip and valley tiles—Hand-made	14 6
(per dozen) —Machine-made	13 10

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality	Foot cube. s. d.		£ s. d.
Dry English Wainscot Billets	16 0	to	0 18 0
Dry Slavonian Billet Wainscot	17 0	to	1 0 0
Dry Cuba Mahogany logs	21 0	to	1 4 0
Square-edged Honduras Mahogany			0 16 6
Log Cut Honduras Mahogany			0 17 6
American Figured Oak			0 13 0
American Plain Oak			0 12 6
Jap. Figured Oak			0 13 0
Jap. Plain Oak			0 12 6
Teak			0 15 0
American Whitewood			0 12 0
African Whitewood			0 8 0
African Mahogany			0 11 0
Australian Walnut			0 19 0
Australian Silky Oak			0 12 0
Best Scotch glue	per cwt.		5 0 0
Liquid glue	per gallon		1 2 0

SOFT WOOD.

MERCHANTABLE BRITISH COLUMBIAN PINE.

	Minimum. £ s. d.	Maximum. £ s. d.
Scantlings in imported sizes		
2 in. by 3 in. to 4 in. by 11 in.	47 0 0	58 0 0

PLANED BOARDS.

PRIME CLEAR BRITISH COLUMBIAN PINE.

	Per standard. £ s. d.
1 in. by 11 in } 1 in. by 9 in. }	71 0 0
	Per square. s. d.
1 in. plain edge flooring	56 3
1¼ in. ditto	70 6
1 in. tongued and grooved	56 3
1¼ in. ditto	70 6

MATCHING.

	per square. s. d.
¼ in.	40 0
½ in.	45 3
1 in.	59 0

PLUMBERS' BRASS WORK.

Delivered in London.

M.O.H.

S.D. BIBCOCKS CRUTCH HEAD, FOR IRON

½ in.	¾ in.
33/–	51/– per doz.

TOILET BIB COCKS FOR IRON.

½ in.	¾ in.
60/–	72/– per doz.

S.D. STOP COCKS FOR IRON.

¼ in.	½ in.	1 in.	1¼ in.	1½ in.	2 in.
33/–	48/–	86/–	209/–	281/–	456/– per doz.

S.D.S. COCKS WITH TWO UNIONS FOR LEAD.

¼ in.	½ in.	1 in.	1¼ in.	1½ in.	2 in.
45/–	77/6	123/–	240/–	372/–	624/– per doz.

DOUBLE NUT BOILER SCREWS.

¼ in.	½ in.	1 in.	1¼ in.	1½ in.	2 in.
5/6	6/8	11/–	24/–	36/–	56/– per doz.

HEAVY CROYDON BALL VALVES.

¼ in.	½ in.	1 in.	1¼ in.	1½ in.
72/–	115/–	144/–	288/–	384/– per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
14/–	18/6	25/9	45/3	64/9	71/6 per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/9	13/6	25/–	37/–	46/– per doz.

LEAD TRAPS WITH BRASS CLEANING SCREWS.

	1¼ × 6 lbs.	1½ × 6 lbs.	2 × 7 lbs.	3 × 7 lbs.
Lead P.	26/–	34/–	55/–	92/– per doz.
Lead S.	34/–	41/–	67/–	115/– per doz.

SOLDER.—Plumbers', 1/6. Tinmen's, 1/11. Blow pipe 2/3 per lb.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information. Prices are subject to 2½ per cent. cash discount.

PRICES CURRENT OF MATERIALS—(contd.)

See Note at top of preceding page.

METALS.

JOISTS, GIRDERS, &c., to LONDON STATION PER TON—

R.S. Joists, cut and fitted	£24 0 0
Plain Compound Girders	26 10 0
Stanchions	29 0 0
In Roof Work	35 0 0

NOTE.—These prices are for standard pieces and not special pieces of an awkward nature.

MILD STEEL ROUNDS.—To London Stations, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	23 5 0	½ in.	21 15 0
⅜ in.	22 15 0	½ in. to 2¾ in.	21 5 0
⅞ in.	22 5 0		

WROUGHT TUBES AND FITTINGS.

Deliveries from works.

Deliveries from London stock further 2½% gross.

10/17

	Tubes. ¼"/6" %	Tubulars, and ⅜"/⅝" %	Flanges. 19/24" ¾"/2" %	2¼"/6" %
Light weight	51½	—	47½	31	57½
Heavy weight	44	44	39½	41	49½
Galv. lightweight	30	—	30	30	30
Galv. heavyweight	20	20	20	20	20

Tubes and tubulars sizes ¼"/⅜" inclusive, charged extra of 5% less gross.

Fittings. Figs. 25/34 5% less gross discount.

Terms.—Nett cash end of month following date of invoice. Carriage paid on lots of £10 nett value and over.

C.I. HALF-ROUND GUTTERS—London Works, per yd. in 6 ft. lengths.

	Gutters.	Nozzles.	Prices ex Stop ends.
3 in.	1/5½	1/2½	4½d.
3½ in.	1/7	1/4	4½d.
4 in.	1/7	1/6	6½d.
4½ in.	1/8½	1/8½	7½d.
5 in.	2/0½	2/0	9d.

O.C. GUTTERS.

3 in.	1/10½	1/7½	5d.
3½ in.	2/1½	1/7½	6½d.
4 in.	2/1½	1/8½	7½d.
4½ in.	2/2½	1/11½	8½d.
5 in.	2/8½	2/3	10½d.

RAIN WATER PIPES.

Per yd. in 6 fts.	Pipe.	Bends. Stock angles.	Branches.
2 in.	2/2½	1/5½	2/2
2½ in.	2/3½	1/8½	2/7½
3 in.	2/8½	2/1½	3/2
3½ in.	3/2½	2/6½	3/7½
4 in.	3/8½	3/0½	4/5

NETT PRICES.

Tonnage allowance—4-ton lots, 5 per cent.
2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices, ex Stock.

Per yd. in 6 fts.	Pipe.	Bends.	Branches
2 in.	3/9½	2/7½	3/2
2½ in.	4/5	2/10½	3/11½
3 in.	4/9	3/2	4/8½
3½ in.	4/10½	3/11½	5/5½
4 in.	5/3½	4/5	6/3½

L.C.C. COATED DRAIN PIPE.

	cwt.	qr.	lbs. in 9 fts.	per yard.	Bends.	Branches.
3 in.	0	3	14	6/0	7/3	11/6
4 in.	1	1	17	8/7	8/2	14/5
5 in.	1	2	18	10/7	14/9	22/3
6 in.	2	0	1	12/9	17/0	29/8

Gaskin, 75/- per cwt.

	Per ton basis in London. £ s. d.
IRON.—Staffordshire Crown, Merchant quality	18 7 6
IRON.—Staffordshire Marked Bars	19 7 6
Mild Steel Bars	19 15 0
Mild Steel Hoops	21 10 0
	Ex Merchant's Stock, per ton (two-ton lots).
Soft Steel Sheets, C.R. and C.A.—	
20 gauge	24 17 6
24 gauge	25 2 6
26 gauge	25 17 6
Galvanised Corrugated Sheets, 6 ft. to 9 ft.—	
20 gauge	27 0 0
24 gauge	27 10 0
26 gauge	28 15 0
Galvanised Flat Sheets, C.R. and C.A.—	
20 gauge	28 10 0
24 gauge	29 0 0
26 gauge	30 5 0
	Per ton £ s. d.
Cut Nails, 3 in. and up	28 10 0

ALL NETT.

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 2s. 4d. to 2s. 7d. per foot super.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil (5 galls.) .. per gallon	0 6 3
Boiled Linseed Oil (5 galls.) .. "	0 6 7
Genuine Ground English White Lead, per cwt.	3 11 9
Genuine White Lead Paint, 14-lb. tins free; per cwt.	4 16 6
Genuine Red Lead "	2 18 6
Linseed Oil Putty (Kegs extra) "	1 3 9
Size, XD quality ftkn.	0 4 9

Turpentine substitute can be obtained and prices vary according to quality from 3/8 gallon upwards.

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. from May 10. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A1	A2	A3	B	B1
Craftsmen	2/0½	2/0	1/11½	1/11	1/10½	1/10
Labourers	1/7	1/6½	1/6½	1/6	1/5½	1/5½

Aberdeen	A	Dumfriesshire	A2	Inverness	*	Perthshire	A2
Ayrshire	A	Dundee	A	Inverurie	A1	Peterhead	A1
Banff	B	Dunoon	A	Kincardineshire	A2	Renfrewshire	A
Berwickshire	A2	East Fife	A	Kinross-shire	A	Rothesay	A
Bridge of Allan	A	East Lothian	A	Lanarkshire	A	Roxburghshire	A2
Broughty Ferry	A	Edinburgh	A	Midlothian	A	St. Andrews	A
Clackmannanshire	A	Fifeshire	A	Monifieth	A	Selkirkshire	A2
Doune	A	Forfarshire	A2	Moray and Nairn	B	Stewartry	A2
Dunblane	A	Glasgow	A	Newport	A	Stirlingshire	A
Dumbartonshire	A	Greenock	A	Peeblesshire	A2	Stornoway	A2
Dumfries	A1	Hamilton	A	Perth	A	Tayport	A
						West Lothian	A

*This town has its own rates: Masons, 1/9½; Carpenters, 1/9½; Slaters, 1/9½; Plumbers, 1/10; Plasterers, 1/10½ but 1/11 is paid owing to the scarcity at present; Painters, 1/9½ and Labourers, 1/5.

The information given in this table is copyright. Rates of wages in England and Wales are given on page 83

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 16 0
Fine do.	"	0 18 0
Fine Copal	"	1 0 0
Pale Copal	"	1 2 0
Pale Opal Carriage	"	1 6 0
Best do. do.	"	1 14 0
Floor Varnish	Inside	1 0 0
Fine Pale Paper	"	1 0 0
Fine Copal Cabinet	"	1 4 0
Fine Copal Flatting	"	1 2 0
Hard Drying Oak	"	1 0 0
Fine Hard Drying Oak	"	1 1 6
Fine Copal Varnish	"	1 2 6
Pale do.	"	1 14 0
Best do.	"	1 4 6
Best Japan Gold Size	"	1 14 6
Best Black Japan		0 12 0
Oak and Mahogany Stain (water)		0 14 0
Brunswick Black		0 9 6
Berlin Black		0 16 0
Knotting (patent)		0 17 0
French and Brush Polish		0 14 0
Liquid Dryers in Terebene		0 11 0

LEAD, &c.

(Delivered in London.)	Per ton. £ s. d.
LEAD.—Sheet, English, 4 lb. and up	38 0 0
Pipe in coils	38 10 0
Soil pipe	42 10 0
Compo pipe	47 10 0

NOTE.—Country delivery, 20/- per ton extra, lots under 3 cwt. 4/- per cwt. extra and over 3 cwt. and under 5 cwt., 2/6 per cwt. extra. Cut to sizes, 4/- per cwt. extra.

Old lead, ex London area, at Mills ..... per ton } £18 0 0.

The Hall Mark AYGEE of Craftsmanship

AIR RAID DAMAGE REPAIRS

GLASS SUPPLIED or GLAZING

SHOP FRONTS AND PLATE GLASS REPLACEMENTS RECEIVE IMMEDIATE ATTENTION

AYGEE LTD.

England's Largest Glazing Contractors.

100 WESTMINSTER BRIDGE RD., S.E.1

Ring: Waterloo 6314 (6 lines)

THE SCOTTISH BUILDER

NEW BUILDINGS

BLANTYRE.—Plans to be prepared for 30 houses, the architect being W. Watts, Albert-st., Motherwell.

DUNFERMLINE.—Ministry of Works requisitioned 9-acre site for purpose of building hostel for 500 recruits to the mining industry at West Fife.

GLASGOW.—Plans in hand for conveniences, etc., at works, for which the architect is James Taylor, 220, West Regent-st., Glasgow.—Plans in hand for Roman Catholic Archdiocese of Glasgow, St. Mary's Rectory, Abercrombie-st., for additions, etc., at Orr-st., for which the architect is John James Devine, 37, St. Andrew's-dr., Pollockshields, Glasgow.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies Registry.

E. E. EAGAN, LTD. (383652). Regd. Nov. 2. 30, Budge-row, E.C.4. To acquire the interest in certain inventions relating to reinforced concrete building materials, plant and accessories, etc. Nom. cap.: £1,000. Dirs.: R. E. Eagan, 57, Barton-court, Barons Court-road, W.14, and others.

GLASS.

SHEET GLASS, ORDINARY GLAZING QUALITY CUT SIZES.

	Per ft. super. d.
18 oz.	3½
24 oz. Clear or "R" quality	5
26 oz.	6½
32 oz.	8½

ENGLISH ROLLED PLATE AND FIGURED CATHEDRAL, ETC., IN CUT SIZES.

Over 500 ft. super of all kinds.	Per ft.
Rolled plate, ¼ in.	6½d.
Rough cast double rolled, ⅛ in.	7½d.
Rough cast double rolled, ¼ in.	7½d.
Figured rolled, and Cathedral, white	6½d.
Figured rolled and Cathedral, tinted	9½d.
Rolled Sheet	6d.
Reeded, Broad Reeded, Cross Reeded and Chevron Reeded, ¼ in. thick	10½d.

Rolled plate is the same price as rough cast double rolled.

	Per ft. s. d.
Wire Rolled, ¼ in. thick	0 9½
Wire Cast, ¼ in. thick	0 9½
Georgian Wired Cast	0 10
"Calorex" Sheet, 21 oz.	2 6
" " 32 oz.	4 0
" Cast, ¼ in. thick	0 9½
" " ⅛ in. thick	1 0
" " ¼ in. thick	1 2
Non Actinic Glass, ¼ in. thick	0 9½
" " " ⅛ in. thick	1 0
" " " ¼ in. thick	1 2

"VITA" GLASS.

	Per ft. s. d.
"Vita" Plate Glass, about ⅛ in. thick— To 7 ft. super	5 0
Over 7 ft. super	7 6
"Vita" Sheet Glass, about 18/20 oz.	2 0
Cathedral "Vita" Glass: ¼ in. thickness	2 0
⅛ in. "	3 0
⅛ in. Georgian Wired "Vita" Glass	3 6

GLASS BRICKS.

	s. d.
P.B. 1—8 in. × 4¾ in. × 3¾ in.	2 9 each nett
P.B. 2—5¾ in. × 5¾ in. × 3¾ in.	2 6 "
P.B. 3—7¾ in. × 7¾ in. × 3¾ in.	3 6 "
P.B. 32—7¾ in. × 7¾ in. × 3¾ in.	3 6 "

Radiused Corner Bricks to match up with—

P.B. 2	4 6 each nett
P.B. 3	6 0 "
P.B. 32	6 0 "

IN PARLIAMENT

London Planning.

SIR WILLIAM DAVISON asked the Prime Minister whether he was aware that local authorities in the London area found it impossible to proceed with their plans for housing and town planning generally till the Government had announced what was their national planning policy and, in particular, as to their policy with regard to the location of industry in London, and as to the probability of any substantial removal from London of existing industries; and when a Government statement would be made in the matter.

MR. CHURCHILL said he was assured by the Minister of Town and Country Planning that local authorities in the London area were making substantial progress with the preparation of their plans.

Experimental Houses.

MR. DRIBERG asked the Parliamentary Secretary to the Ministry of Works if he would invite 20 average housewives, at present living in overcrowded conditions in the districts in which 20 experimental houses were to be built in 1944, to occupy these houses with their families rent free for a reasonable period of time, so that the various departmental experts might have the benefit of their practical observations based on actual experience.

MR. HICKS said that the houses, which would illustrate various methods of construction, would be required at first for demonstration and inspection purposes. When it was possible to arrange for the houses to be occupied, their letting to those most in need of accommodation would be arranged by the Minister of Health in consultation with the local authority.

Building Acts and Regulations.

MR. BOSSOM asked the Minister of Health if he would explain the situation now existing regarding the various Building Acts and Regulations.

MR. WILLINK said that if he had rightly understood the point, the situation was that outside London there were a few towns with special Acts of Parliament forming an exception from the general system. The general system was that building was controlled by local authorities by means of bye-laws made under the Public Health Acts, and the bye-laws everywhere in force were now of a modern type, unlikely to impose any improper restriction upon building.

Prefabricated Buildings.

MR. EDWARDS asked the Minister of Health what types of prefabricated buildings were under consideration for temporary housing; and the names of the manufacturers.

MR. WILLINK said that the general question of temporary dwellings was at present under consideration in consultation with the Minister of Works, but no decision had yet been reached as to their practicability. The second part of the question did not therefore arise.

MR. MORGAN asked the Minister of Health whether, when water mains and electric light cables passed unprovided houses and cottages in rural areas, he would consider calling on the owners to instal facilities for both commodities.

MR. WILLINK said that under the present law, owners of houses could be required to provide main water and electricity only if the absence of these services rendered a house in some respect unfit for habitation, but it would be appreciated that if alternative arrangements for the supply of water, lighting and heating were already in existence, the Courts to which the owner would have a right of appeal might not uphold that view.

Farm Cottages.

MR. WILLINK told SIR HERBERT WILLIAMS that 105 agricultural cottages were completed for occupation by Dec. 31; 49 had been occupied.

In reply to SIR PERCY HURD, MR. WILLINK said that acceptable tenders had been received and approved for 2,830 cottages. At Dec. 31 last 105 cottages were finished, and work was proceeding on 2,397 others, of which 1,279 were roofed in or at an advanced stage. The information as to finished costs related to 54 cottages only of a parlour type, and showed an average all-in cost of £974 per cottage, of which £39 10s. represented the cost of land and £934 10s. the cost of construction, including roads, water supply, architect's fees, etc. Rural district councils, in conjunction with other local authorities, were submitting short-time housing programmes to be put in hand as soon as conditions permitted. Proposals so far received from rural district councils covered 37,000 houses.

In reply to his recent notification to local authorities that he was prepared to examine proposals for urgently needed post-war schemes for water supply and sewerage and sewage disposal, he had so far received from rural district councils four schemes for water supply and ten for sewerage and sewage disposal; the total cost of water schemes he estimated at £66,677, and the others at £778,367.

I.H.V.E. Examinations.

The 1944 examinations for Associate Membership and Graduateship of the Institution of Heating and Ventilating Engineers will be held during the early part of May. Completed application forms should be in the hands of the Acting Secretary of the Institution at 21, Tothill Street, S.W.1, by January 31 if possible, or by February 19 at latest.

Messrs. Thomas Parsons' New Premises.

Messrs. Thos. Parsons and Sons, Ltd., 315-7, Oxford Street, paint, varnish and cellulose manufacturers, have acquired 70, Grosvenor Street, London, W.1, for use after the war as their London headquarters. This is a fine Georgian wide-fronted house, comparatively recently converted at a cost of something like £20,000 into business premises. It consists of a spacious ground floor and three floors over, with excellent basement accommodation, together with a recently constructed building of four floors in the rear, giving access to 25, Grosvenor Mews. The property is well appointed and contains some fine panelling. It is the intention of the company to provide, in due course, extensive showrooms illustrating various schemes of decoration for the use of their clients.

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FUTURE CONSTRUCTION

The Editor welcomes authentic information for this section from architects, surveyors or contractors. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Tuesday morning.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

JANUARY 31.

Bushey (Herts).—Strengthening communal shelters. S.

Holland (Lincs) C.C.—Erection of day nursery at Holland-rd., Spalding. W. H. Smith, County Architect, County Hall, Boston, Lincs.

Romford T.C.—Permanent repairs to 4 houses. B.E. and S. Dep. 10s. 6d.

FEBRUARY 2.

Oxon C.C.—Removal, transport and re-erection of timber-framed hut from Banbury County School, in conjunction with erection of precast concrete standard hut. G. R. Hutton, County Architect, 3, Becket-st., Oxford. Dep. £2 2s.

FEBRUARY 3.

†**Devonshire C.C.**—Extensions at Hawkmoor Sanatorium, nr. Bovey Tracey. H. V. de Courcy Hague, County Architect, 97, Heavitree-rd., Exeter. Dep. £3 3s. Tenders by March 3.

FEBRUARY 4.

Coventry Markets Committee.—Warehouse extensions. D. E. E. Gibson, City Architect. Dep. £2 2s. to City Treasurer.

Coventry National Emergency Committee.—Erection of blast walls and casualty entrance at No. 4 first-aid post, Allesley. D. E. E. Gibson, City Architect, 1a, Warwick-row. Dep. £2 2s. to City Treasurer.

FEBRUARY 5.

Gellygear U.D.C.—Improvements to external walls of administrative block and cubicle pavilion at Isolation Hospital. E. and S., Council Offices, Hengoed. Dep. £1 1s.

FEBRUARY 7.

Leamington Spa T.C.—Erection of brick sculleries at (a) Shrubland-st. schools; (b) Rugby-rd. schools; (c) New-st. school. J. Sutcliffe, B.E.

Montgomeryshire E.C.—Construction of central canteen kitchen and dining-room at Llanfyllin. T. G. Davies, D. of E., County Ed. Offices, Newtown.

Thornbury R.D.C.—Construction of fire station. R. Huntington, S., Council Offices. Dep. £2 2s.

FEBRUARY 14.

York T.C.—For repair and adaptations at Holgate-rd., Queen Anne-rd., Bishopsgate-st., and Huntington-rd. C. J. Minter, City E., Guildhall. Dep. £1 1s.

PAINTING, ELECTRIC LIGHTING, HEATING, ETC.

FEBRUARY 2.

Leeds T.C.—Painting exterior and part interior at Holbeck swimming baths. W. S. Cameron, M.Inst.C.E., City E.

FEBRUARY 8.

Billinge and Winstanley U.D.C.—External painting of 172 houses. C., Council Offices.

FEBRUARY 15.

***Waltham Joint Hospital Board.**—External painting, etc. R. Dempsey, Clerk to the Board, Isolation Hospital, Honey-la., Waltham Abbey, Essex.

ROAD, SEWERAGE AND WATER WORKS

FEBRUARY 7.

Beverley R.D.C.—Provision, laying and jointing of approx. 4,900 yds. of 4-in. and 5-in. spun iron water mains, together with installation of valves, hydrants and other incidental works. G. Palfreyman, E. and S., 36, Market-pl., Beverley. Dep. £1 1s.

Westmerland C.C.—Surface dressing. A. S. Glover, B.Sc., A.M.Inst.C.E., County S., County Hall, Kendal.

FEBRUARY 12.

Bromley T.C.—Surface dressing. B.E.

Ludlow R.D.C.—For laying of approx. 2,150 yds. of 2-in. water main. W. F. N. Watkins, C., 152, Corve-st.

ROAD MATERIALS, ETC.

JANUARY 31.

Merioneth C.C.—County S.

FEBRUARY 3.

Swansea C.B.—B.E. and S.

FEBRUARY 4.

Kensington B.C.—T.C.

Sedgeley U.D.C.—S.

FEBRUARY 5.
Swadlincote U.D.C.—E. and S.

FEBRUARY 6.
Rhondda U.D.C.—E. and S.

FEBRUARY 7.
Burnley C.B.—B.E. and S.
Cornwall C.C.—County S., Truro.
Enfield U.D.C.—E. and S.
Warrington C.B.—B.E. and S.

FEBRUARY 9.
Wandsworth B.C.—T.C.

FEBRUARY 10.
Northumberland C.C.—County S.

FEBRUARY 11.
Heston and Isleworth T.C.—B.E.
Tottenham B.C.—T.C.

FEBRUARY 12.
Horbury U.D.C.—E. and S.
Selby R.D.C.—S.

FEBRUARY 14.
Blyth T.C.—B.E.
Chertsey U.D.C.—E. and S.
Rutland C.C.—County S.

FEBRUARY 18.
Crompton U.D.C.—Acting E. and S.
Southwark B.C.—T.C.

FEBRUARY 19.
Wilmslow U.D.C.—S.

FEBRUARY 29.
***Chelsea T.C.**—T.C.

PUBLIC APPOINTMENTS

JANUARY 31.

Manchester T.C.—Senior Technical Assistant, £1,050-£100-£1,250, bonus £33 16s. Forms from R. H. Adcock, T.C.

FEBRUARY 3.

Petersfield R.D.C. — Temporary Assistant Building Surveyor. A. J. C. Mackarness, C., 16, High-st., Petersfield.

FEBRUARY 12.

***Middlesex E.C.** — Temporary full-time Graduate Teacher of Building Subjects. Application forms from Principal, Twickenham Technical College, Egerton-rd., Twickenham.

FEBRUARY 14.

***Oxford E.C.**—Full-time Teacher of Building, Drawing and Geometry at Schools of Technology, Art and Commerce. Forms from Chief Education Officer, City Ed. Offices, 77, George-st., Oxford.

FEBRUARY 16.

***Southampton C.B.**—(1) Deputy Town Planning Officer; (2) Two Technical Assistants; (3) Two Junior Assistants. R. E. H. Meggeson, T.C.

NO DATE.

***Godstone R.D.C.**—(a) General Assistant, £6 per week; (b) Architectural Assistant, £6 per week; (c) Woman Technical Assistant, £5 per week. F. W. Walpole, C., Council Offices, Oxted, Surrey.

GENERAL BUILDING WORK

Ashton-under-Lyne. — J. E. West, "Wood Lea," Mottram-rd., Stalybridge, proposes erection of "Old Nook" hotel at junction of Broadoak-rd. and Lees-rd.

Bolton.—T.C. propose: Renovations to nurses' home and reception-room and erection of prefabricated building for additional accommodation for nurses at Townleys hospital; additions at Hollins Cottage Homes; additional offices for E.C.

Bury. — T.C. approved erection of prefabricated building at Danesmoor Home for Children.

Cholmondeley (Cheshire). — Building Committee propose erection of village hall.

Coventry.—T.C. propose erection of buildings and concentrator plant at salvage depot, at £3,000; provision of lavatory accommodation at Gulson library, at £220.

Coventry.—T.C. propose erection of four prefabricated buildings as extensions to Town Thorns Institution, for Social Welfare Committee.

Crewe. — Cheshire Higher Education Subcommittee propose adaptations and equipment of Hightown Methodist Church as youth institute and club.

Darlington. — N.A.A.F.I. club to be established.

Eccles.—E.C. propose day nursery at Westwood Park, at £1,987.

Huyton. — Lancashire E.C. propose branch libraries at Longview, Page Moss estates and Higher-rd., Halewood.

Jarrow. — T.C. to build four concrete 'bus shelters. Plans by J. Scott Weir, B.E.

Manchester.—P.H.C. applying for sanction to borrow £4,506 for erection of a day nursery at Alexandra Park and extension of Church-st. nursery, Beswick.—T.C. approved additions to garage, E. T. Buckley, architect, 8, Parkview, Audenshaw; alterations to bakery, Gorton, for W. Storey; reconstruction of portion of laundry, Cheetham, for Prospect Laundry Co., Ltd., A. M. Isaacs, architect, 136, Middleton-rd., Crumpsall.

March.—U.D.C. propose public conveniences at Creek-rd.

Newcastle-on-Tyne. — J. R. Sherwood, 7, St. Hilda's-rd., Hexham, prepared plans for additional sanitary accommodation at works.—Hetherington & Wilson, County-chbrs., Westgate-rd., Newcastle-on-Tyne, are architects for additions to factory. — P. L. Browne, Son & Harding, Pearl-bldgs., Newcastle-on-Tyne, are architects for erection of lavatories to works.

Oldham. — Health Committee propose sanitary annexe to "A" block, General Hospital, Rochdale-rd., at £720.

Romford. — B.C. seeking sanction to establish two more nurseries.

Rotherham.—E.C. appointed A. F. Scott & Sons, architects, 23, Tombland, Norwich, to prepare plans for proposed extensions for technical, art and commercial education.

Salford.—H. Lewis, 136, Ordsall-la., propose rebuilding "Welcome Inn" P.H.

Salford. — T.C. approved erection of precast concrete building adjoining school buildings for Salford Grammar school Flight, A.T.C.

Scarborough. — Jones & Rickaby, Westborough, Scarborough, prepared plans for alterations at Clifton-st., for Westbrook Furnishing Co., Ltd.

Sunderland.—T.C. approved erection of nursery at Margaret Thompson Park, at £2,286. Plans by J. E. Lewis, B.E.

Wallasey.—T.C. approved partial reinstatement of Earlston House, at £1,985.

Wigan.—T.C. approved extensions to bakery, for W. L. Lyon.

BRITISH RESTAURANTS AND CANTEENS

Bolton.—T.C. approved canteen and bungalow, for William Wadsworth & Sons, Ltd.

Brandon and Byshottles. — U.D.C. propose B.R. at Meadowfield. Plans by F. Hedley, Council Offices.

Burton-on-Trent.—E.C. propose wash-up facilities for school meals at Winshill infants' school and dining-hall and kitchen at Clarence-st. school and at Horninglow school.

Durham.—E.C. to build cooking centre at Burnopfield. Plans by F. Willey, 34, Old Elvet, Durham.

Hazel and Bramhall.—U.D.C. propose B.R. at Hazel-gr.

Lancashire.—E.C. propose adaptations and equiment for cooking depots at Maghull hostel, at £980, and at Huyton hostel, at £2,060.

Manchester. — T.C. approved canteen and workroom to factory, R. Thomasson (L.), architect, 16, Moor-la., Kersal, Higher Broughton; canteen and offices, C. Holmes, architect, 39, Well-st., Bradford, Yorkshire.

Notts.—E.C. proposes extensions to kitchen at County Secondary school, West Bridgford. Plans by E. W. Roberts (A.), County Architect, Shire Hall, Nottingham.

Oldham. — T.C. approved staff canteen, for James Stott, Ltd., cotton spinners.—E.C. propose dining-rooms and wash-up facilities for school meals at Westwood, Parish Church, St. Paul's Church, St. Peter's Church, Clarkfield junior and Clarkfield infants' schools.

Preston.—T.C. propose adaptation of Wycliffe Memorial school, Ashton-on-Ribble, for B.R.

Prudhoe-on-Tyne.—U.D.C. propose to set up B.R. Plans by T. Harper, Council Offices.

Ross. — Herefordshire E.C. propose dining centres at Lochcarron Public school, at £350, and Plockton High School for Girls, at £700.

Rowley Regis.—E.C. propose kitchen at Rowley Hall schools. Plans by Pritchard, Godwin & Clist (FF.), architects, Bank-bldgs., Kidderminster.

Scarborough. — E.C. propose alterations to existing building for conversion into kitchen for provision of school meals.

Stockport.—E.C. propose cooking and kitchen accommodation at Fylde Lodge High school.

Stockton-on-Tees.—Plans approved for erection of canteens and dining centres to serve various schools, for E.C.

Swinton and Pendlebury.—E.C. propose canteen kitchen centre at Cromwell-rd. school.

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LONDON.

Wandsworth.—B.C. accepted tender of Walker (Tooting), Ltd., at £325, for erection of annexes at four wardens' posts.

PROVINCIAL.

Billingham-on-Tees.—Static water tank proposed for N.F.S.

Bromyard.—U.D.C. propose public mortuary.

Oldham.—T.C. propose: Erection of building to house fire-fighting appliances at Children's Homes, Fir Bank; replacement of protective works at P.A.C. Institution, Rochdale-rd.—T.C. approved static water tanks on various sites.

Swinton and Pendlebury.—T.C. propose demolishing buildings at Manchester-rd., Swinton, and clearing site and erection of one-storey building for mortuary and stores depot, at £400. Plans by A. Cardwell, B.S., Town Hall, Chorley-rd., Swinton.

TENDERS

Tenders for A.R.P. work will be found under "A.R.P. Schemes."

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government departments*.

Altrincham.—Canteen to works: *Matthews & Searle, Ltd., Chepstow-rd., Chorlton-cum-Hardy, Manchester, 21.

Bromsgrove. — Erection of 'bus shelters at County High school, "Coach and Horses," and The Crescent, for U.D.C. F. W. Goodman, S.: *J. Elwell, Ltd., Road End Ironworks, Oldbury, Worcs, £178.

Bury.—Erection of garage to works: *James Berry, Ltd., Chapel-st., Heywood.

Bury. — Additions to works: *Brierley & Thompson, Ltd., Union Saw Mills, Bury.

Cleckheaton. — Works extensions: *Dean & Brooke, Westgate, Cleckheaton.

Darlington.—Erection of offices, for Parkin, Ness & Co.: *J. W. Richardson, Quebec-st., Darlington; alterations to premises, for Darlington Laundry: *G. Dougill & Son, Chestnut-st., Darlington; erection of salesrooms and offices: *W. Sanders Hutton, Ltd., Post House Wynd, Darlington; additions to lavatory accommodation at Scala Cinema, Eldon-st.: *H. Parvin & Son, Horsemarket, Darlington.

Denham. — Erection of six-roomed detached house, for Land Settlement Association, Ltd. F. C. Levitt, 1, Market-sq., Biggleswade, Beds: Prince of Burleigh Street (Cambridge), Cambridge £1,680
G. H. Kempster, Ltd., Watford 1,409
The Bury St. Edmunds Development Co., Ltd., Bury St. Edmunds 1,347
E. D. Morgan & Partners, Lancing, Sussex 1,163
*R. Saunders & Sons (London), Ltd., 124, Fonthill-rd., Finsbury Park, N.4 1,138

Ealing.—Repairs at Borderston school, for T.C.:—
Davis & Co. £1,715
Percy Bilton, Ltd. 1,556
K. L. Williams 1,538
W. J. Dickens, Ltd. 1,460
Raglan Bldg. Co. 1,401
*G. Wood, Ltd. 1,363

Heywood. — Additions to works and boiler-house: *James Berry, Ltd., Chapel-st., Heywood.

Huyton-with-Roby. — Erection of prefabricated building, drainage and foundations as extensions to Park View school, Page Moss estate, for Lancashire E.C. L. Evans, County Architect, County-bldgs., Fishergate-hill, Preston: *J. Lucas & Son (Builders), Ltd., Eccleston-la., Prescot, nr. Liverpool, £636.

¶London (Air Ministry).—List of new contracts to value of £500 or over for week ended January 22.

Surfacing work: William Tawse, Ltd., Aberdeen.

Civil engineering work: Fitzpatrick & Son (Ctts.), Ltd., London, E.3; J. W. Page, Ltd., Hampton Hill, Middx.

Agricultural work: En Tout Cas Co., Ltd., Leicester.

Well-boring work: Duke and Ockenden, Ltd., Littlehampton.

Building work: T. Gill & Sons, Norwich; J. Youngs and Son, Ltd., Norwich; P. Bilton, Ltd., London, W.1; John Greenwood, Ltd., London, E.C.4.

Electrical work: Shrops, Worcs and Staffs Electric Power Co., Halesowen, Birmingham.

Drainage work: Bosworth & Wakeford, Ltd., Daventry.

General maintenance work: Ainsty Building Estates, Ltd., York; Comben & Wakeling, Ltd., Harrow, Middx; Jesty & Baker, Weymouth; John McLean (Builders), Ltd., Wolverhampton; Y. J. Lovell & Son, Ltd., Gerrards Cross.

Supply and erection of structural steelwork: Joseph Parks & Son, Northwich, Ches.

¶London (Ministry of Works). — Contracts placed by M.O.W. during week ending Jan. 20: Cardiganshire: Building work, Hussey, Egan & Pickmere, Ltd., Main-st., Pembroke.

Carmarthenshire: Building work, T. E. Richards, Northampton Yard, Swansea.

Ches.: Building work, G. Wimpey & Co., Ltd., Thorpe-la., Sidings, Robin Hood, nr. Wakefield.

Durham: Building work, L. W. Evans (Con.), Ltd., 18, Norfolk-st., Sunderland.

Herts: Building work, H. C. Leach, 8-12, Southfield-rd., Waltham Cross, Herts.

Lancs: Building work, J. W. Bradley, Hall-la., Farnworth, Lancs.

Middx.: Building work, G. Wood, 29-31, Hammersmith Broadway, W.6.

Somerset: Building work, M. J. Gleeson, 882, Chesterfield-rd., Sheffield.

Yorks: Building work, J. Gerrard & Sons, Ltd., Swinton, Manchester.

¶London (War Dept.).—Works contracts placed by War Department for week ended January 15.

Yorks: Miscellaneous work, Wm. Anelay, Ltd., York; building work, J. B. Brook & Sons, Ltd., Huddersfield.

Derbyshire: Hutting (erection), Sherriff & Co. (1943), Ltd., Ireton, Leicester; miscellaneous work, Horace Hoskins, Tunstall, Stoke-on-Trent.

Leics: Hutting (erection, A. Mason (Contractors), Ltd., Mansfield, Notts.

Kent: Electrical work, Bective Electrical Co., Ltd., London, W.1; miscellaneous work, A. Ross & Co., Westgate-on-Sea; G. F. Baldwin, Kemsing, Kent.

Devon: Miscellaneous work, P. W. Wilkins & Son, Ltd., Torquay; F. Burley & Sons, Tavistock; N. Pratt & Sons, Ltd., Exeter.

Co. Fermanagh: Roadwork, J. J. Scallon & Sons, Irvinestown, Co. Fermanagh.

Oldham. — Rebuilding lavatory block, for James Greaves, Ltd., cotton spinners. Tom Hayes, architect, 10, Clegg-st.: *J. & J. Blunn, Ashton-rd., Oldham.

Oswestry.—Erection of public conveniences, Beatrice-st., for T.C. J. E. Taylor, B.S.: *J. Barlow & Sons, Gobowen-rd., Oswestry, £245.

Rochdale.—Additions to factory: *R. & T. Howarth, Ltd., Crossfield Works, Rochdale.

Stretford. — Additions to canteen to works: *Donald McDonald, Ltd., 607a, Stretford-rd., Trafford Bar, Manchester, 16.

Sunderland.—For rebuilding works: *D. & J. Ranken, Stockton-rd., Sunderland.

Sunderland.—For extensions to works: *J. & T. Parker, St. Oswald's House, Sunderland.

Tyne Dock (Co. Durham).—Erection of canteen, post office, for Tyne Improvement Commission, Newcastle-on-Tyne: *Benjamin Peel, Ltd., East Mill Works, North Shields.

Windsor.—Construction of additional works at Sunninghill and Sunningdale sewerage works Whitmoor Bog, Berks, for R.D.C. Lemon & Blizard, consulting civil engineers: *Sadler & Co., Emsworth, Hants, £7,638.

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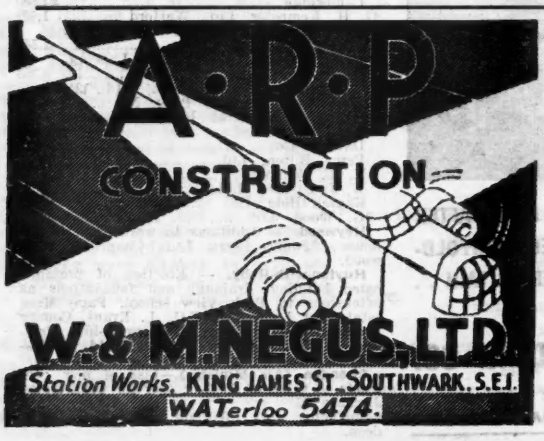

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